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Denver's Branch Library System

By Miss Rena Reese
Assistant Librarian

DENVER'S branch library system includes eight buildings erected during the period from 1913 to 1921. Before the branches were built Denver's citizens were forced to depend entirely upon the main library for their books, and this, in many instances, worked a hardship owing to the area and topography of the city. Denver covers approximately sixty squares, a little less than New York City proper. In the two boroughs of Manhattan and the Bronx there are more than 3,000,000 people. In Denver, with the same area, there is a population somewhat over 300,000. Library service in Denver is affected, also, by the fact that the city is intersected by the Platte River and Cherry Creek, with the railroads and railroad yards lying in the resulting lowlands. Thus, some sections of the city which are not far distant are quite inaccessible to each other. To serve this population, therefore, the eight branches have been built at strategic points in order to make the radius of influence as wide as possible. For the reason that the population is not congested the buildings are not large, and would serve as models for village libraries.

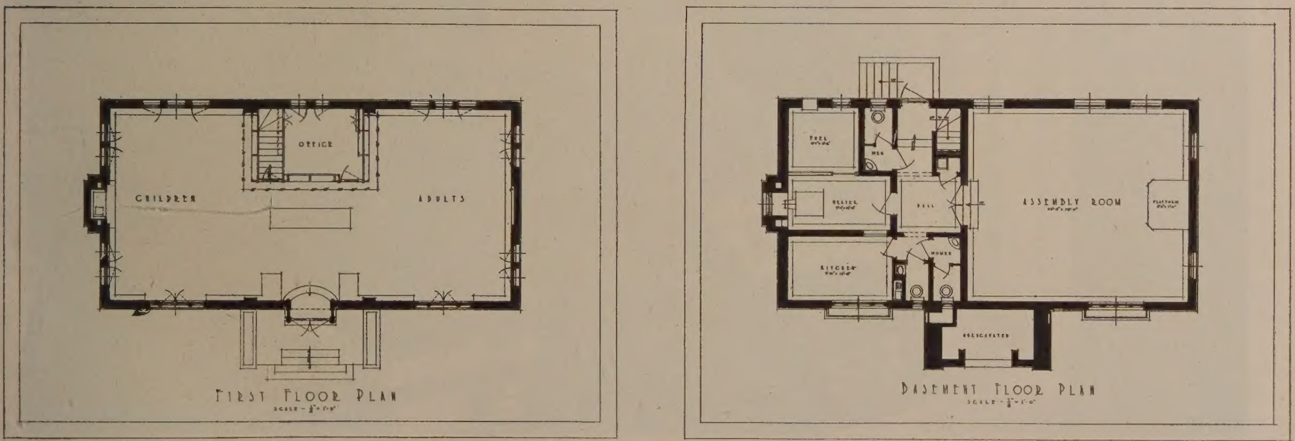
The cost of the buildings has varied with their size and date of contract, and demonstrates the differences in pre-war, war, and after-war prices. Denver gratefully acknowledges two gifts of $80,000 from the Carnegie Corporation, with which buildings were erected, the entire sum covering the cost of all, but each one varies from the others in contract price.

The first requisite in designing Denver's branch libraries was to provide for economical, successful library work. The next desire was to provide as attractive and artistic buildings as the money made possible. As a result, Denver has what is frequently regarded in other cities as a somewhat unusual exhibition of beautiful and useful library structures. They have been so favorably spoken of that several library boards in other cities have expressed interest in duplicating them, and this has already been done. It is said that the essential features of the Sarah Platt Decker branch building have reappeared in Wisconsin, Iowa, and California, and possibly other places. All buildings were designed by Denver architects.

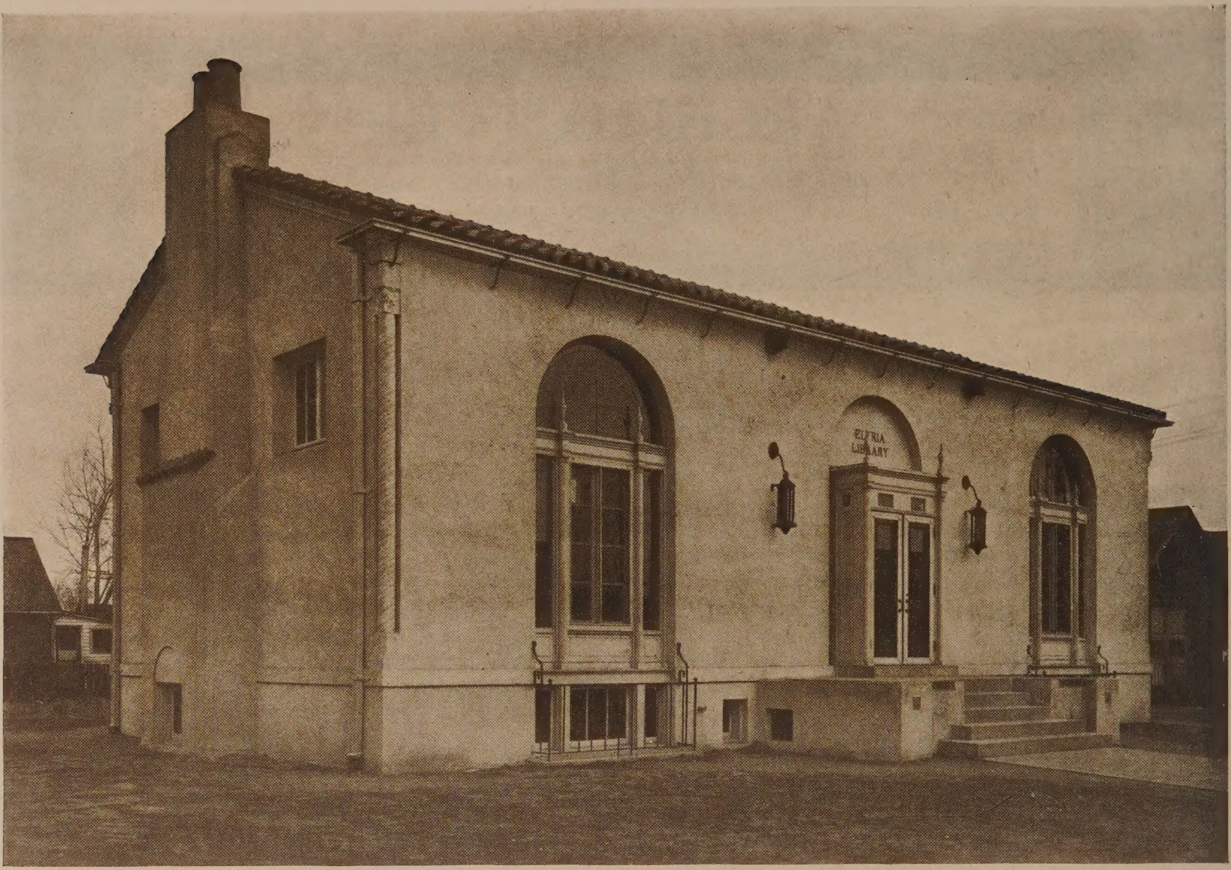
For the purpose of carrying on their activities, all branch buildings were similarly equipped. Irrespective of cost, each one has shelf capacity for about 7,000 volumes. In all buildings there are auditoria, storage-rooms, a librarian's room with built-in tables and drawers for storing small supplies and doing book-repair work, and also built-in combination kitchenette-cupboards with running water, electric hot-plate, and dishes for the use of library workers who live at a distance too great to go home for meals.

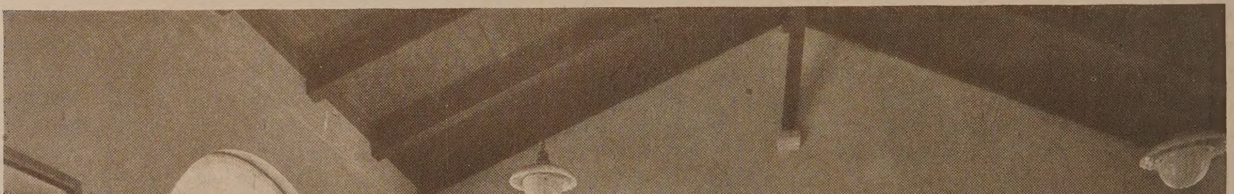
Every library is a community centre. Meetings of clubs, local improvement associations, neighborhood organizations, child welfare clinics, garden exhibits, classes, lectures—all find a place and a welcome within their walls.

Six of the branches have been named for citizens prominent in the life and development of the city. Among them may be noted the Woodbury Branch, named for Roger W. Woodbury, the first president of the Denver Library Board, and the Decker Branch, named for Sarah Platt Decker, at one time president of the General Federation of Women's Clubs.



Floor plans, Elyria Branch Library.





CHILDREN'S DEPARTMENT.

ELYRIA BRANCH LIBRARY.

H. J. Manning, Architect.

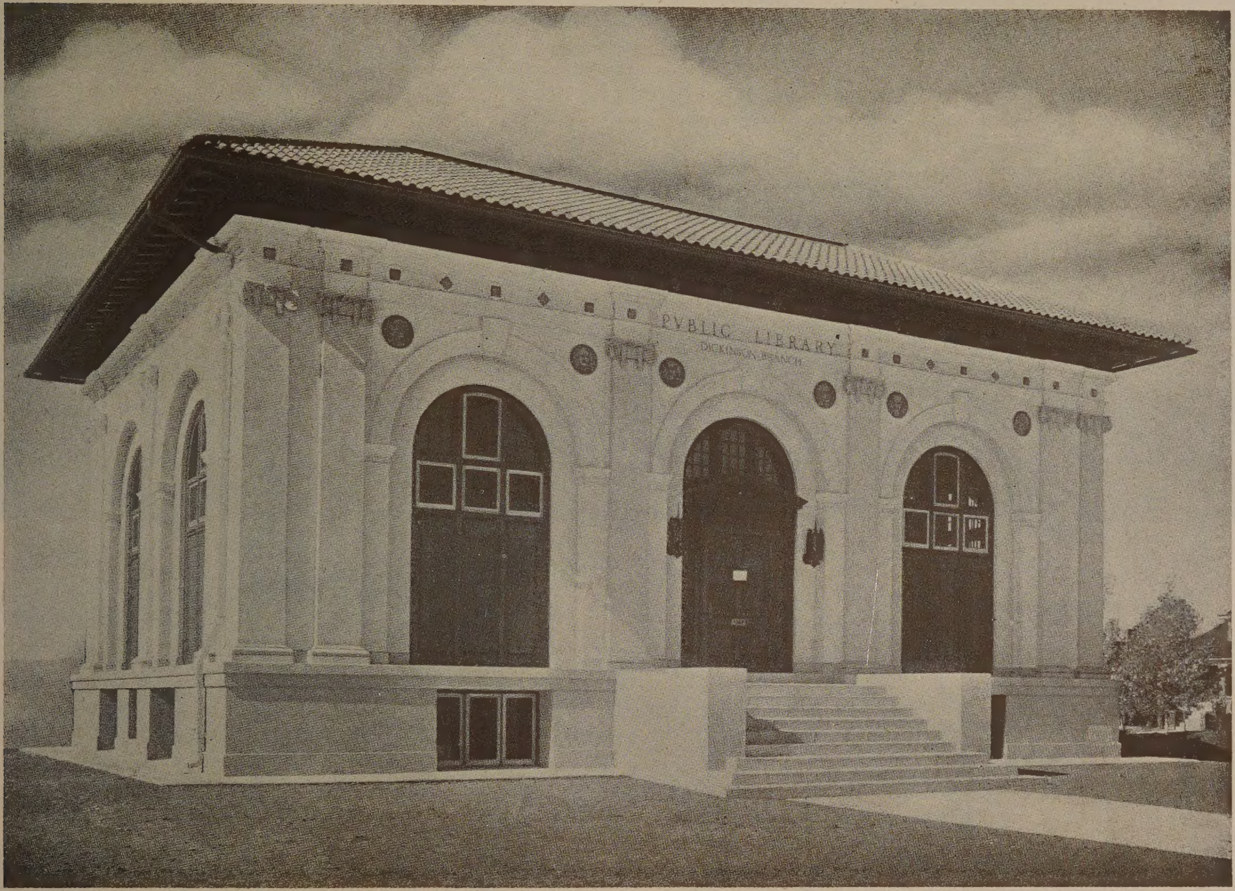
Elyria Branch Library

Architect, H. J. Manning, Denver, Colo.

This branch was built in 1920 and cost complete $16,000. The contract price including architect's fee, shelving, fixtures and sidewalks was $13,517.53. It contains 37,935 cubic feet and the cost for one cubic foot was 27 cents.

It is a Spanish building with white cement laid over brick walls and has a Spanish tile roof. The brackets underneath the cornice and the exterior grille work are all in wrought iron as are the lanterns at the building's entrance. The door is panelled in Spanish tiles and the two large windows in the front hall are of leaded glass. The interior is open and attractive. There is no ceiling except the roof, which is faced with wood, and the heavy beams are exposed.

In the children's end of the building is an attractive fireplace in brick and tiles. In both of the end walls, there are recessed spaces which will be filled with decorative wall paintings by Albert Olsen. The money for these paintings was given by the Denver Union Stockyards Company.



Dickinson Branch Library

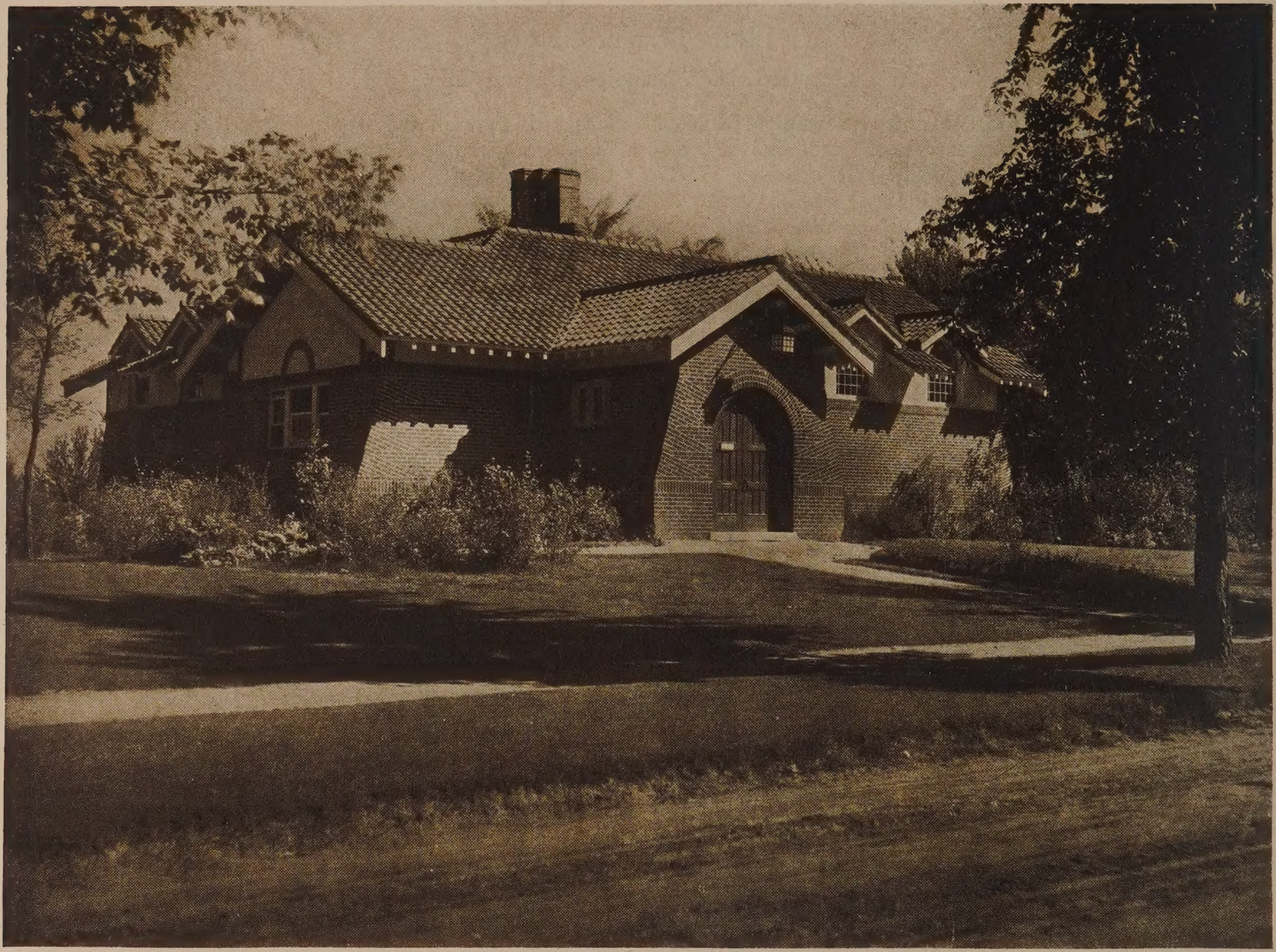
Architect, Maurice Biscoe, formerly of Denver, Colo.

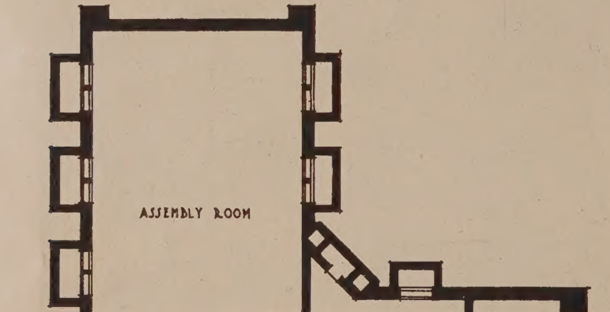
This is the smallest of Denver's branch libraries but is very distinctive. It was built, decorated, and furnished for $16,000 in 1913 when prices were lower than they have been since.

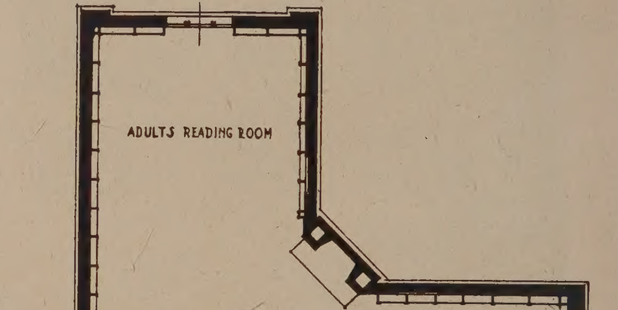
The exterior walls are of brick covered with cement in gray-green and ivory, with colored inserts and a frieze under the eaves of heraldic designs in color. The spaces outside under the high windows are panelled in brown oak. The interior has a domed ceiling, three lunettes and wall decorations by Allen True. The roof is of red tile.

This is a rectangular building with space for vestibule and stairway taken out immediately inside the entrance. The librarian's room is in the basement, which arrangement is both advantageous and disadvantageous. Its distance from the main desk and many trips up and down stairs are sometimes inconvenient, but it is quieter, more remote from the public and therefore more private and restful, making it on the whole a desirable plan.

The charm of this building lies in its excellent proportions and color and the fact that it has a certain atmosphere of building, decorations, furnishings, and books making a complete and satisfying whole.



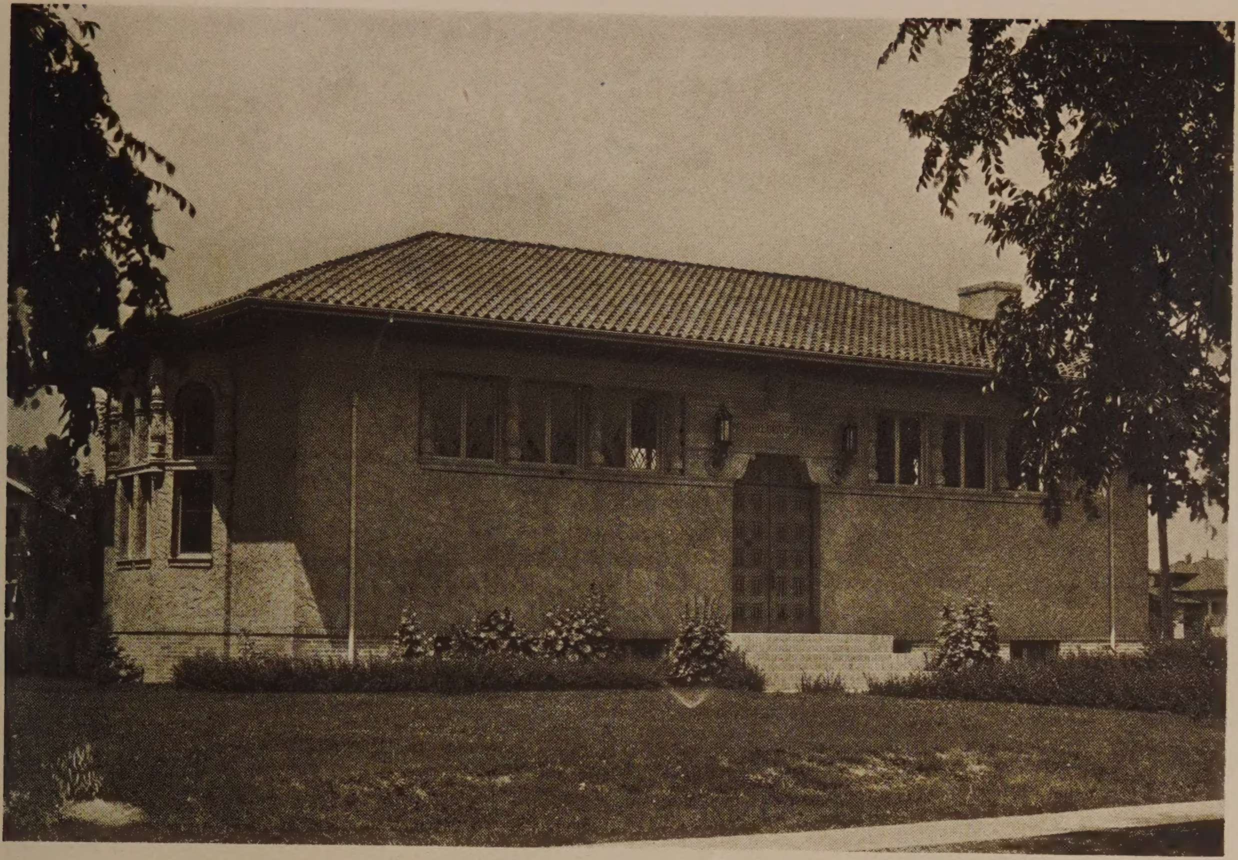


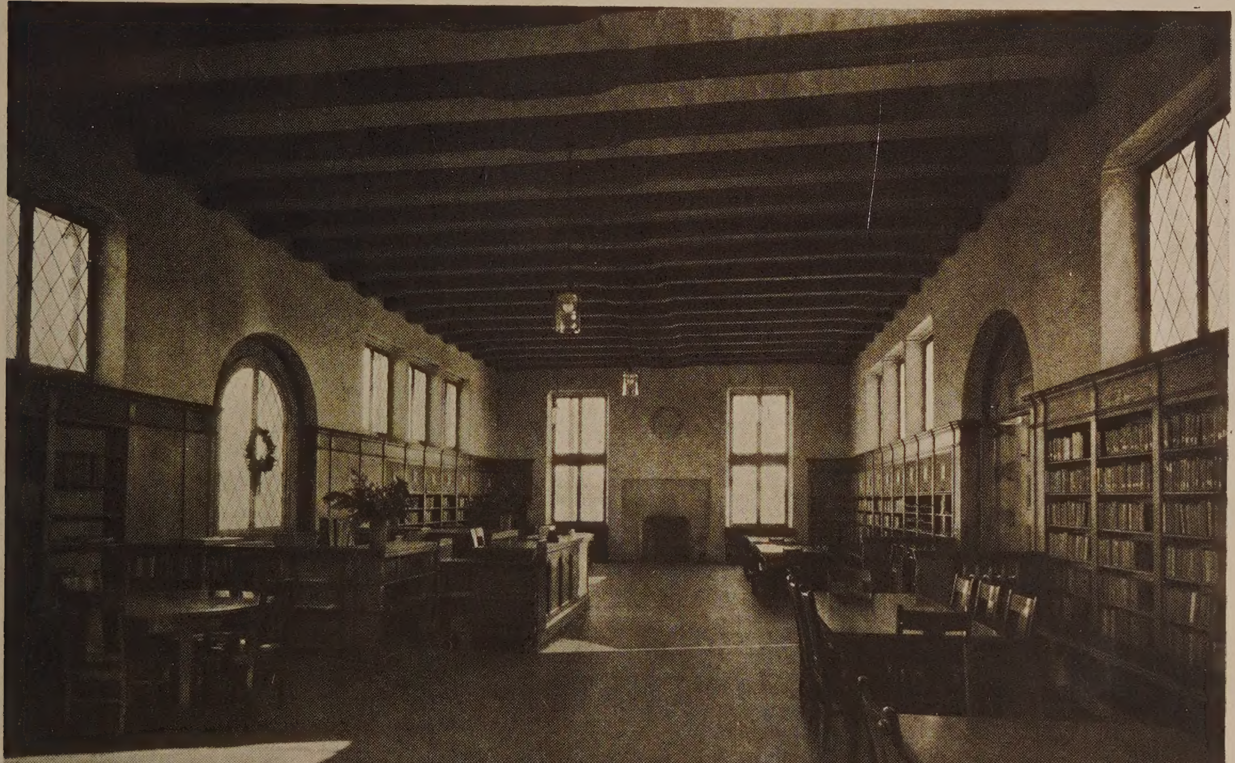


SMILEY BRANCH LIBRARY, DENVER.

Mountjoy, French & Frewen, Architects.

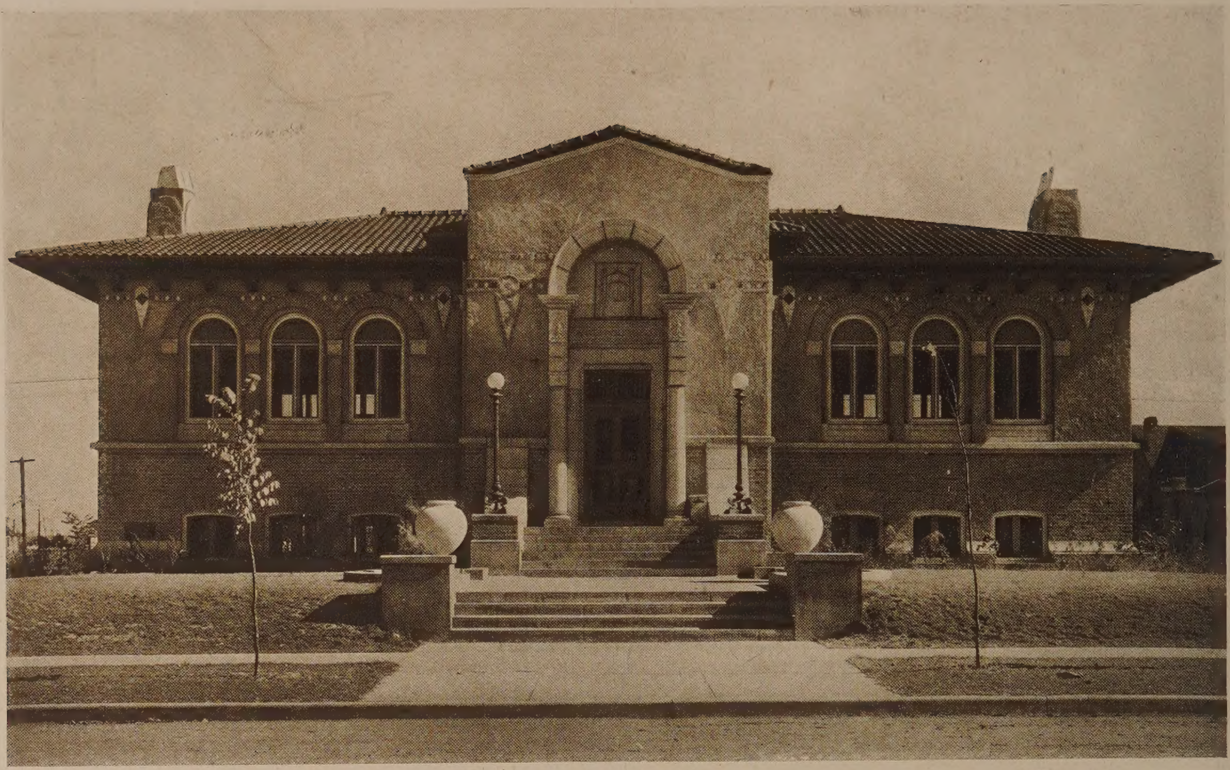
Erected in 1917 at a cost of $20,000 complete and furnished. It contains 63,700 cubic feet of space; the cost per cubic foot being 31½ cents. The interesting features are the location of the librarian's room, the delivery-desk, and the fireplace.

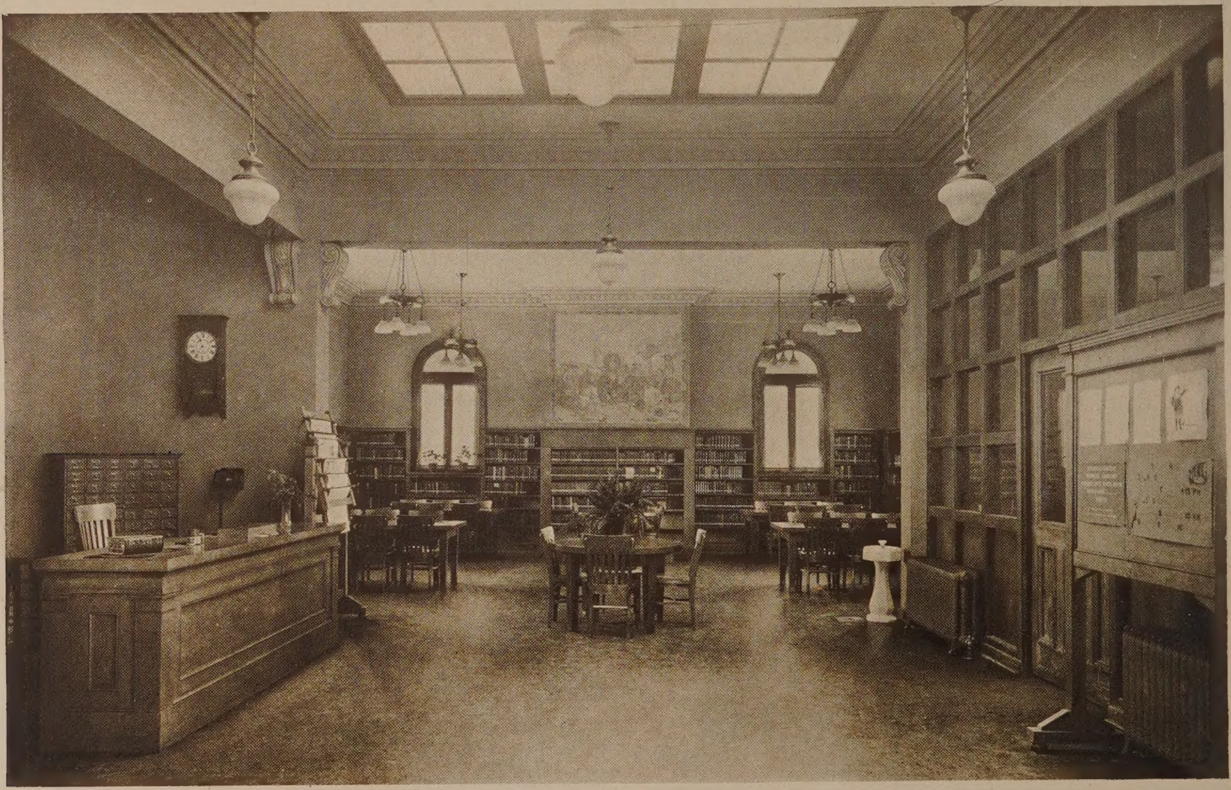




PARK HILL BRANCH LIBRARY, DENVER. M. H. Hoyt, Architect.

Spanish type, in one large spacious room, with librarian's desk and stairway to basement at centre opposite entrance. The cost was $25,190—built and furnished complete in 1920. The cubic foot cost was 38 cents.





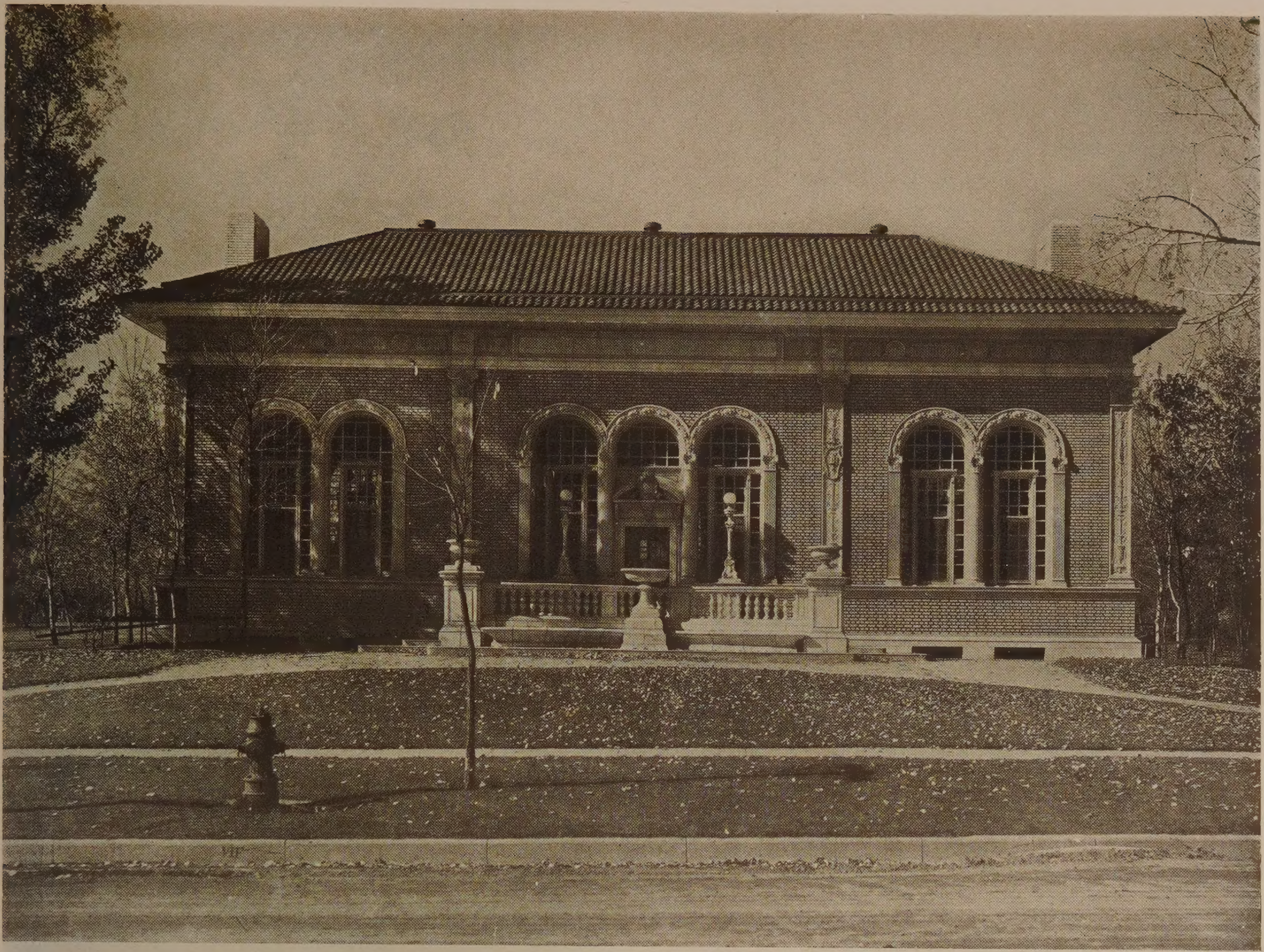
Warren Branch Library

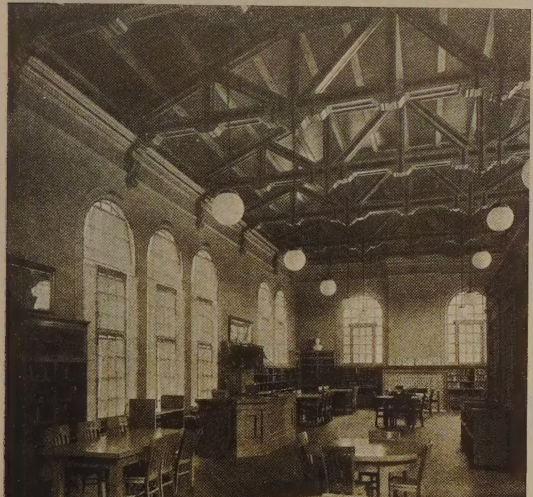
Architects, Fisher Brothers, Denver, Colo.

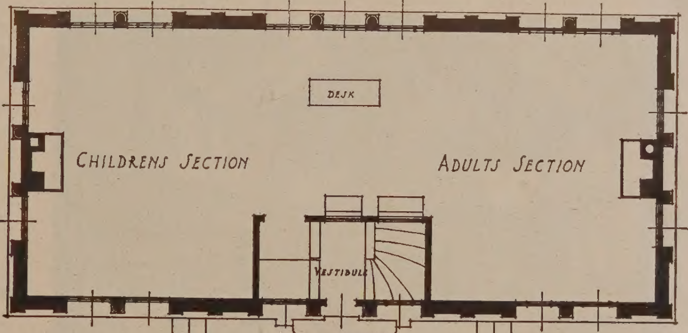
This building was erected in 1913 at a cost of $20,000 complete and furnished. It is one of the larger branches, containing 86,160 cubic feet with a cost of 22 cents per cubic foot. The contract price exclusive of furniture was somewhat under $19,000.

It is Spanish in type, with walls of Roman brick and gray cement inlaid with a frieze of colored marbles, and a stencilled design under the overhanging eaves. The roof is of red Spanish tiles. There is a fireplace in the end of the room devoted to the children. The opposite wall in the adult department bears one large mural painting by Allen True of Denver, at one time an assistant to Frank Brangwyn, the great English decorative painter.

Not only is the Warren branch very attractive but one of the most conveniently planned and easily administered in the entire branch system. Its interior is satisfying to the eye, too, with its gray finished woodwork and furniture and light-tan walls.





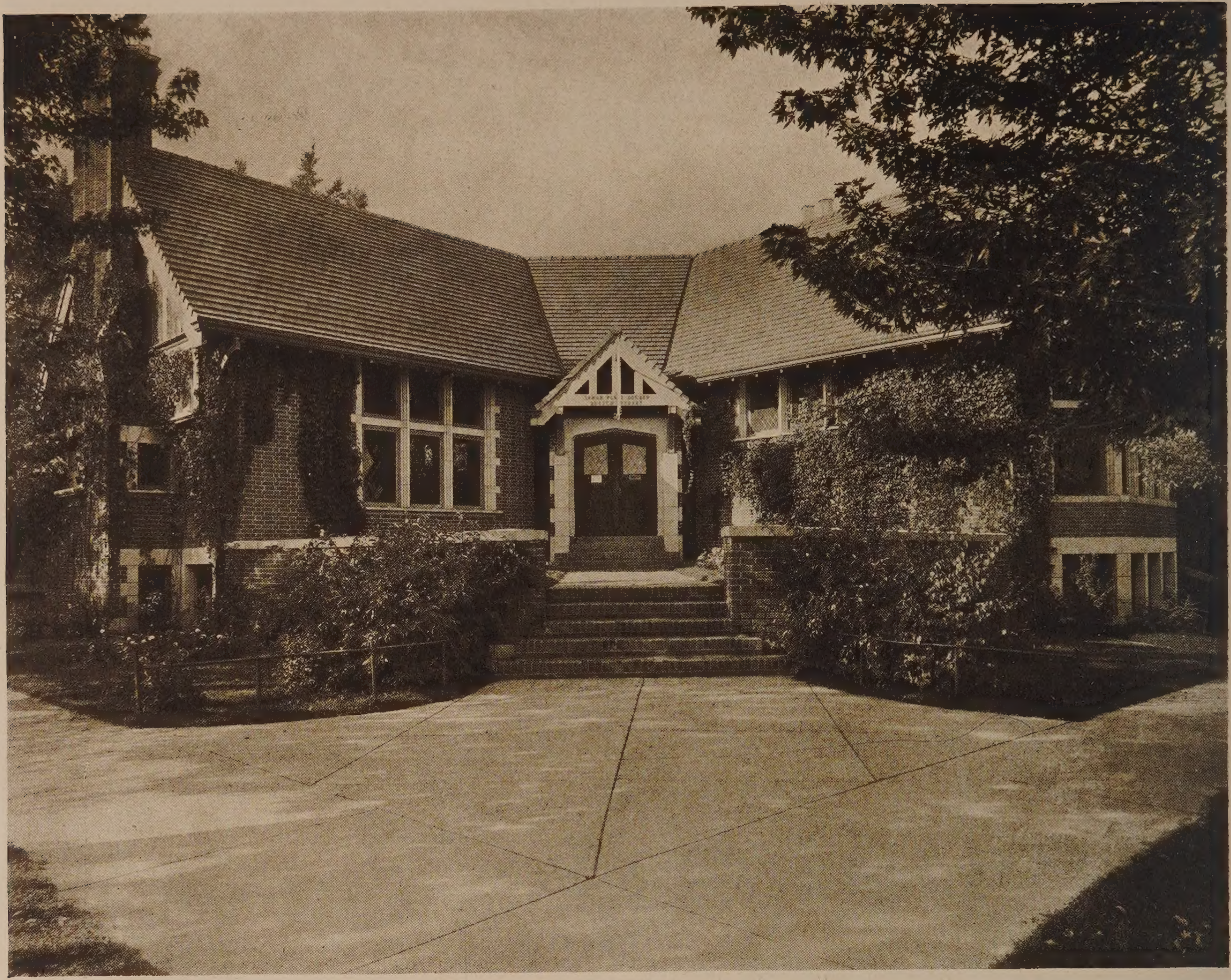


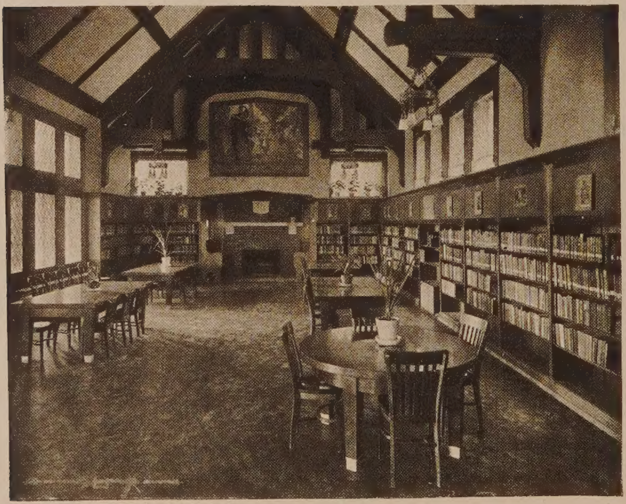
CHILDREN'S ROOM.

WOODBURY BRANCH LIBRARY, DENVER.

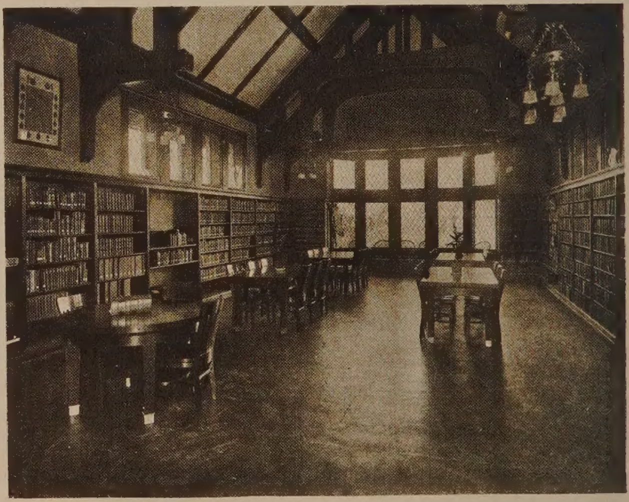
J. B. B. Benedict, Architect.

The main floor is one open room with the exception of the entrance vestibule. The roof timbers are exposed, the walls are stippled in light blue and buff with an ornamental frieze, and all the furniture is stained pearl gray.





CHILDREN'S ROOM.



ADULTS' ROOM.

Morean & Norton, Architects.

DECKER BRANCH LIBRARY, DENVER.

The building is of English cottage type with L-shaped plan. It is built of tapestry brick, terra-cotta trim, and a roof covering of flat tiles in shades of green. Built in 1913 at 30 cents per cubic foot. Two great advantages of L-shaped buildings are the complete separation of the children's and adults' reading-rooms without dividing partitions, and the complete supervision of these rooms from the delivery-desk. The disadvantage is that they are less compact in arrangement and require more ground space. They are excellently adapted for a village or small city.

Bronze and Brass

By David B. Emerson

BRONZE and brass are very closely related. That, as our old friend Macauley would say: "any school boy knows." But just what that relationship is and where the difference between them lies, many who are not school boys do not know.

The name of bronze carries with it the air of something very mysterious to the uninformed, some vague idea of a large number of mixtures and alloys, for different uses, which is all quite wrong, as bronze as we know it in architectural practice is all practically the same composition, being an alloy made up of not less than 90 per cent copper, 7 per cent tin, and the balance either lead or spelter, which is commercial zinc. These proportions may be varied slightly, but they are to all practical purposes almost standard with the great majority of bronze founders.

Color in bronze is either the result of surface treatment of the metal, using different chemicals to obtain the various colors, or else by exposure to the elements to give what is known as a patina. The natural color of bronze after being thoroughly cleaned with acid is a bright reddish-gold color, and after from two to ten years in the atmosphere it becomes practically dead black.

Bronze is divided into two classes, cast bronze and wrought bronze. Cast bronze is produced by melting the metal in crucibles, using anthracite coal as a fuel, or else in the more modern electric furnaces, and pouring the molten metal into sand moulds. In the production of wrought bronze the molten metal is cast into ingots and then rolled into sheets of the desired thickness.

The so-called extruded bronze is not a true bronze, although it is generally classed as such, as the copper content is only about 68 per cent. This is a comparatively new process, having been introduced into this country from England about twenty years ago. It is produced by pouring the semi-molten metal into large cylinders and then forcing through steel dies by hydraulic pressure, after which the resultant shapes are straightened by means of tension machines. These extruded shapes have found considerable favor with bronze workers, their true lines, absolute straightness, and freedom from twists making it possible to fabricate window-frames, sash, and similar material far more accurately than was ever possible with cast bronze; also at considerably less cost.

All large bronze work, such as doors, bank screens, elevator fronts, etc., is built up of a combination of cast and wrought bronze, with brazed joints.

The great value of bronze as an ornamental material is its susceptibility to finish, the only limit being the size of the owner's purse, as it can be tooled almost if not quite to the fineness of gold and silver. In the case of the cheaper grade of work bronze is finished by merely removing the fire skin—which is a roughness on the surface produced by casting—by grinding and filing. Where a finer finish is desired the surface is finished with a draw-file after removing the fire skin, and all ornament is then hand-chased. The final finishing is the coloring of the surface, described earlier in this article.

Bronze should never be used where any great amount of wear is liable to occur, such as in thresholds, ornamental inserts in pavements, hardware in public or semi-public buildings, hand rails on staircases, etc.

I remember some twenty-five years ago a firm now very prominent in New York, but then just starting out, erected a building in the New York financial district, and specified a "statuary bronze" railing at the main entrance, not knowing that "statuary" was merely a surface coating. The railing when first erected looked very well, but like all bronze exposed to the weather it began to change color. The enthusiastic colored janitor began polishing it very regularly, with the result that the finish was rubbed off a large portion of the railing and the indignant architects complained bitterly to the bronze workers that the railing was not what was specified.

Although bronze is regarded almost entirely as an ornamental material, it has a small amount of structural use. It is without doubt the very best material for dowels, clamps, and anchors for use with marble or limestone, especially where they are to be exposed to the weather, as bronze is absolutely non-corrosive, will not stain the stone as galvanized iron sometimes does, and lasts practically forever. As it requires no finish, which is the great item of cost in bronze, it is very little more expensive than the less satisfactory material; in fact, on a building costing $100,000 or more that little item of extra cost could never be found.

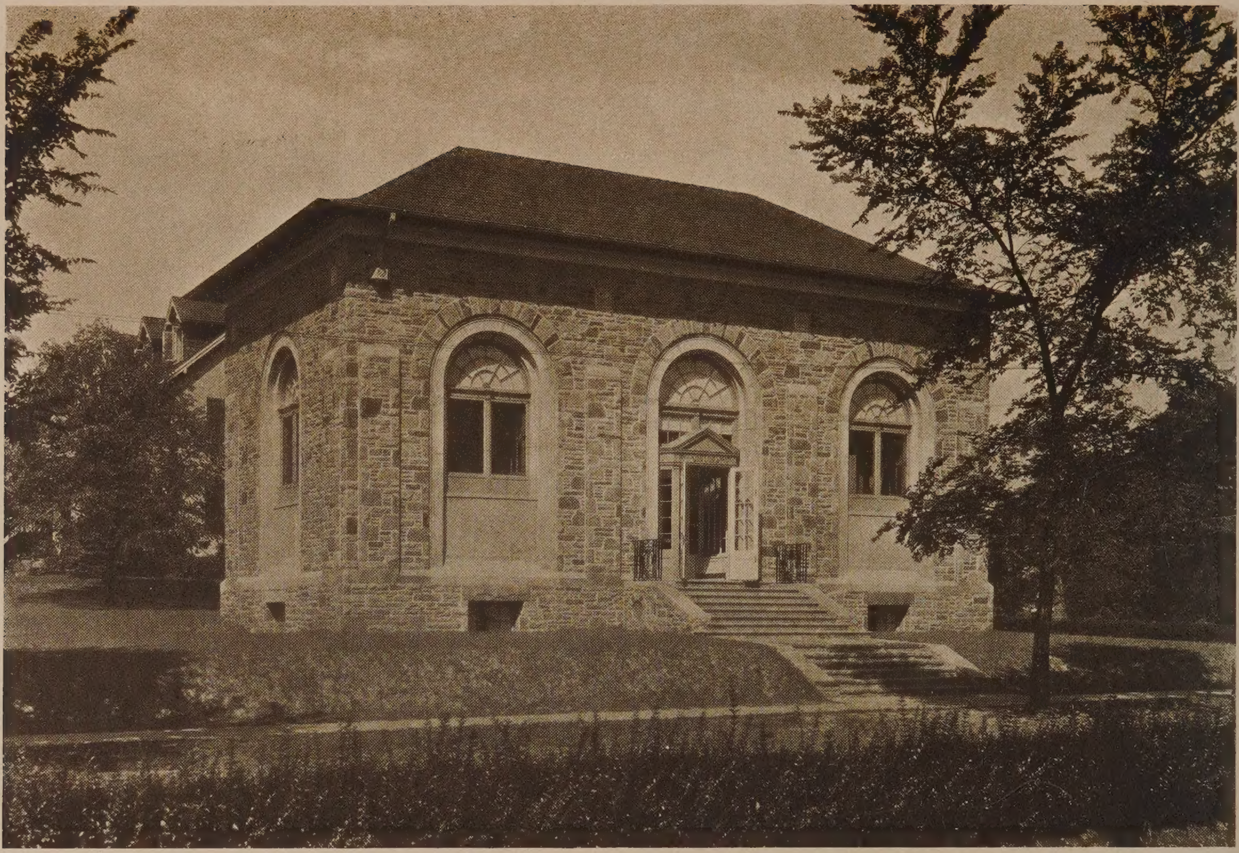
Brass is an alloy of copper and zinc, having a copper content of from 50 to 60 per cent. As bronze may well be called the aristocrat of all the architectural metals, brass is the good reliable laborer of the family. Its uses are legion. For plumbing and heating, it is the material from which all faucets and small valves are made, the working parts of all large valves are of brass; brass traps, brass pipe, and a score or more of other specialties too well known to be mentioned might be added to the list. It is also used extensively in hardware and in the metal parts of electric switches and receptacles. Brass, like bronze, is divided into two classes, cast brass and wrought brass, and they are produced in the same manner as are cast bronze and wrought bronze. Brass is frequently colored by chemical treatment the same as bronze.

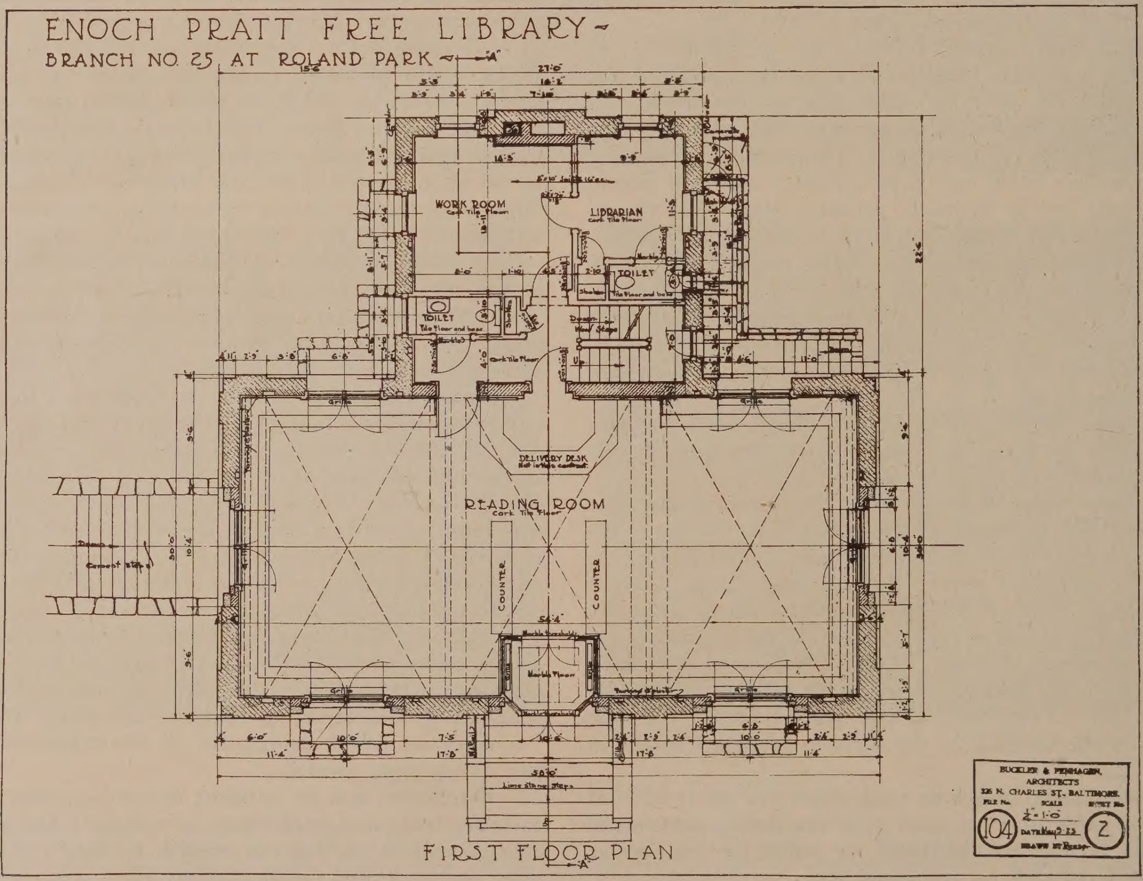
In addition to the multitude of utilitarian uses of brass it has now and has had for centuries quite a considerable use as an ornamental metal, being used for railings, screens, grilles, etc., and we all of us know the good old brass knockers which ornament many doors.

One of the uses of brass as an ornamental metal which is comparatively unknown to the great majority is in the form of leaf work, rosettes, and other small ornaments used in conjunction with wrought iron and painted to match the surrounding iron work, something which is done both in this country and in Europe. The reasons for this are that cast brass is a much tougher material than cast iron, consequently less liable to fracture if struck. It is somewhat ductile and can be bent into shape, which is impossible with cast iron, and it is easily finished by hand tooling.

A very notable and beautiful example of the use of brass ornament in connection with iron work is the famous stair-railing and strutting ramp in the Petit Trianon at Versailles, on which practically all the ornament is brass and at one time painted.

Discovered first by accident in man's earliest attempts to make tools and implements of metal, it has been used continuously in one form or another for nearly if not quite sixty centuries, and remains to-day the acknowledged aristocrat of all building metals.





ENOCH PRATT BRANCH LIBRARY, BALTIMORE, MD. Buckler & Fenhagen, Architects.

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Editorial and Other Comment

"The Enjoyment of Architecture"

WE are cribbing the title of Mr. Hamlin's delightful book, one of a few that offers an introduction to a subject that can be made to yield enjoyment or made, both for layman and practitioner, a source of confusion and weariness of the spirit. The trouble with so much writing about architecture and the arts in general seems to be the desire on the part of the book-makers to appear unduly profound, to dig into the whys and wherefores, the psychology, the philosophy, the biology, the things that make good cross-word puzzles but call for a lot of patience and make you wonder what it is all about. Ruskin isn't so much in these days; he was one of the rhapsodists, one of those emotional fellows who made his language fairly sing, but whose judgment, after all, wasn't so sound as it might have been. But, at any rate, he made an impression upon his generation of the value of a search for beauty, and by the persuasive appeal of his own enthusiasm carried into thousands of homes something that helped to make life more worth living.

There is enough in architecture itself to write about without making it a mere background for all sorts of vague theories and futile word-spinning. We are told that we may follow the growth of a people's civilization and culture in their buildings, and this is an obvious enough truth in general. But we sometimes wonder how future generations are going to "size up" these busy times, how they can determine from our conglomerate architecture the character of the people who above all things express the age of steel. Are our skyscrapers any more significant of daring and aspiration, however, than the Gothic cathedrals; are we more enterprising than the builders of Babylon; are we more enamoured of power, more full of pride in our achievements than Rome, have we manifested any superiority in the search for the laws of symmetry and proportion that have preserved the Greek temples as models of beauty and consummate skill?

We have wandered from our topic—rather—but let's come back and say how much pleasure and profit we have derived from reading a recent book by Mr. Magonigle. No hair-splitting here—knowledge plus a fine capacity for interpretation in terms that we can all understand. And, to hark back to the beginning, we would include, in the category of books that belong in this class, the one whose title stands at the head of this editorial.

Such books make architecture and art a living, intimate part of our daily lives.

In Memory of Mr. Goodhue

THE recent memorial exhibition of drawings by Mr. Goodhue at the Century Club, New York, brought together many things that were familiar only to the comparatively few. His many-sided interests were made manifest as well as the carefulness and patience that dominated all he did. None of the things shown attracted more attention than his beautifully executed decorative drawings in pen and ink. He had a remarkably keen appreciation of the expressive line. He was ever the artist in all he undertook, and his architecture was the development of a finely cultivated taste, refined and strengthened by constant study and exceptional knowledge. Everything he did bore the stamp of an original mind.

With high respect for tradition he used old forms with a vivifying individuality that gave them a new meaning. We wish that the exhibition as shown at the Century might be seen at every architectural school in the country. We have travelling exhibitions of paintings; why not pass along the inspiration of the work of Mr. Goodhue, who added so much to the advancement of our architectural distinction?

Small-Town Libraries

OF all the public buildings in a city or town none becomes more intimately related to the community than the library. It is a meeting-place for all kinds of people, for all the various racial elements that make up our mixed population. The library becomes a tremendous influence in Americanization, a source of help and inspiration under the direction of sympathetic and trained executives. Architecturally the library may be made something more than merely a place in which to store books, and many of the smaller library buildings have an appeal in themselves. How often, as you pass through some country town, your attention is called to the "free library"; it's nearly always a matter of local pride, and within recent years justly so, merely as an attractive building.

Our Artists and Craftsmen Have Not Kept Pace with the Architects

MR. J. MONROE HEWLETT, chairman for the Committee on Allied Arts of the American Institute, says:

"We are living in a period in which the development of knowledge, skill, and imagination on the part of the architects has far surpassed the development of these qualities on the part of the artists and craftsmen upon whom we are relying to supply the numberless objects, materials, and treatments necessary to impart to architecture the finished quality due to a proper blending of tradition and imagination. Study of the art of the past makes it evident that the variations by means of which we distinguish the work of one country or epoch from another country or epoch, have been largely contributed by the specialists called in for the enrichment or furnishing of the structure and, for the past century or so, the invigorating influence of this kind of contribution to the art of architecture has been almost nil.

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LIBRARY

"The arts that we may regard as distinctly accessory to architecture are dominated either by technicians without much æsthetic training or by trained artists whose knowledge of the technic of the crafts through which their designs are to be rendered is but slight. The vitality of the art of architecture in America to-day is displayed rather in finding new combinations and arrangements of traditional forms and details than in adding to architecture new motives and details.

"The architect as the presiding intelligence in the general evolution of decorative art, in order to contribute his full quota to this evolution, must acquire more knowledge of the traditions and practice of craftsmanship than has as yet characterized his equipment, and we would especially direct the attention of the profession to the allied schools of architecture and the other arts now being carried on under the auspices of the University of Oregon.

"The architectural sculptor and the mural painter, on their part, must require a fuller knowledge and comprehension of design and ornament and, thereby, put themselves in a position to contribute something tangible to such arts as stained glass, mosaic, woven textiles, printed textiles, faience, metalwork and wood and stone carving."

Overalls *vs.* White Collars

ANOTHER triumph for overalls over white collars is reflected in the report that more than 1,700 of the 2,700 night students at the Carnegie Institute of Technology this year are taking courses in the building and machinery trades. The growth in night student enrolment in these trade courses, which is this year about 100 per cent over that of three years ago, gives further evidence, the report suggests, that young men are more and more appreciating the opportunities to win success by the "overall route" rather than through the "white collar" jobs.

Although a majority of the night students enrolled in the trade courses are regularly employed in trades directly or indirectly related to their night studies, attention is called to the fact that a surprisingly large proportion of the students are filling "white collar" jobs in the daytime. Many of these are working as draftsmen, tracers, clerks, or timekeepers, and are taking trade courses, the report points out, either to shift later to work as tradesmen or to familiarize themselves with more skill in craftsmanship in order to progress faster up the ladder of industrial success.

Special significance is seen in the report that 844, or nearly half, of the students taking courses in the College of Industries are enrolled in courses connected with the building trades. This number is also nearly one-third of the total night enrolment for the whole institution.

In the building trade courses the largest group enrolment is reported for the Department of Electrical Equipment and Construction, with an enrolment of 174 night students. Next in line is the Carpentry Shop, with 121 night students, a registration that taxed facilities to the extent that further enrolments were stopped early in the term. The courses in plumbing constitute the next highest enrolment in the building trades, with 115 students.

Of the courses related to the machinery trades, the classes in the Department of Automobile Maintenance and Operation lead all others in enrolment totals, with a registration of 187 night men. Mechanical Drawing has 140 enrolled, 64 are taking courses in Machine Shop Practice, and others of the shops specializing in machinery courses report large enrolments this year.

We Are Not Big Enough, Says Ralph Adams Cram

THERE is no longer a vital, inspiring, directing energy in the world that achieves its outward showing in great art through its sensitive agents, the architects and other artists, and since this is so, it is a great mistake for us to think that we are big enough in ourselves to contribute what the zeitgeist withholds. If you want plain speech, we are not big enough men to do it. We are not great in the sense in which the master-builders of Athens and Constantinople and Venice and Burgundy and Spain and the Ile de France and England and Flanders were great. We know more than they, infinitely more—except as to what things are worth knowing. It isn't our fault, we work as hard as they and with equal devotion and sometimes equal prayers. The trouble is—"the hungry sheep look up and are not fed." We would give our lives, and perhaps even our souls, if only we could breathe in the same divine inspiration that filled the air of Athens, Paris, Sienna, Salamanca, Oxford, instead of the effluvia of glutted cities, the smoke of the black country, the crash and war of factories, the bad air of politicians, the dirty propaganda of newspapers.

But, and here is the saving fact, the real spirit, the inspiring breath, still holds in places, and here, if we will, we can find the breath of inspiration we need. Not to invent some new thing like a carburetor or a religion or a philosophy or a new architectural style, but to recover the truths of old arts from their forms and spiritual radiance that emanates from them and modestly, humbly, to try to re-create these forms, not as final ends in themselves, but as recovered truths after long night, facts to hold to, foundations to build upon, landmarks in the great adventure wherein we, even we, may play our part in recovering right values for the world and bringing it about that in the end they shall prevail.

A Standard Size for Brick

THROUGH the good offices of Herbert L. Hoover and the simplified practice division of the Department of Commerce the brick industry has at one stroke been enabled to sweep away an infinite variety of odd sizes of brick and establish one standard size for the seven billion building brick produced every year in the United States. This size is approximately 8 x 3¾ x 2¼ inches. The only exception now to be allowed is in the case of smooth-faced brick for special exterior use, in which a very slight variation in one dimension only is permissible.

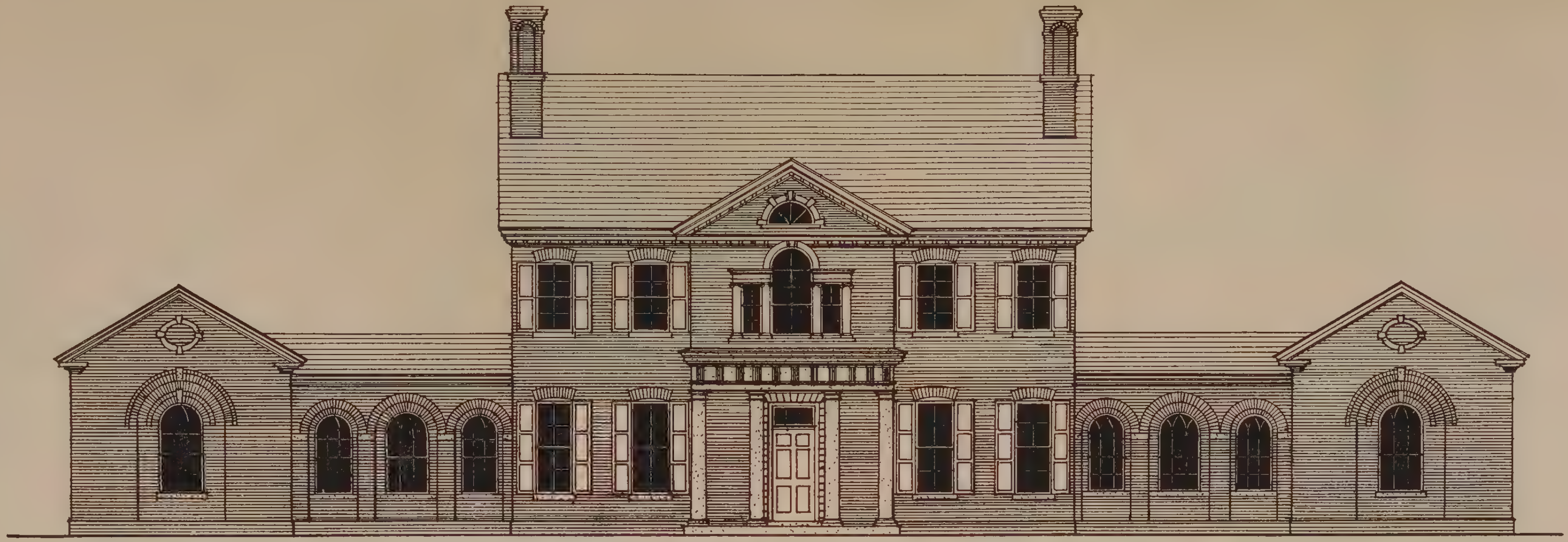
The common brick industry established the standard size some years ago, but experienced trouble because its standard was not insisted upon for public work and by many architects.

With the government now definitely supporting the industry in its efforts to standardize its product, it is expected that before long all specifications will call for standard-sized brick, to the great benefit not only of the brick industry but of all users of its product.

Convention of the Tile and Mantel Contractors of America

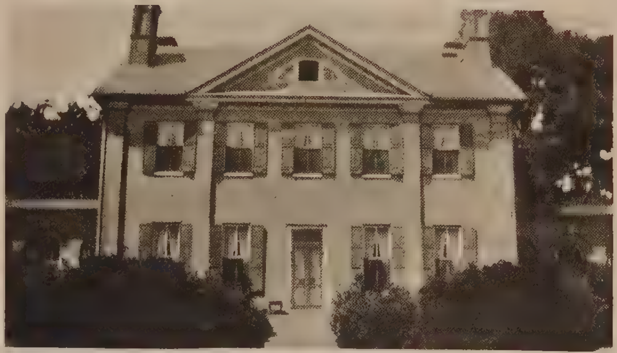
LOUISVILLE, Kentucky, is fast becoming known as a Convention City.

The Tile and Mantel Contractors will hold their convention there February 10–13, and the committees are hard at work making and completing plans with their customary generous hospitality.



~North Elevation~

Scale feet

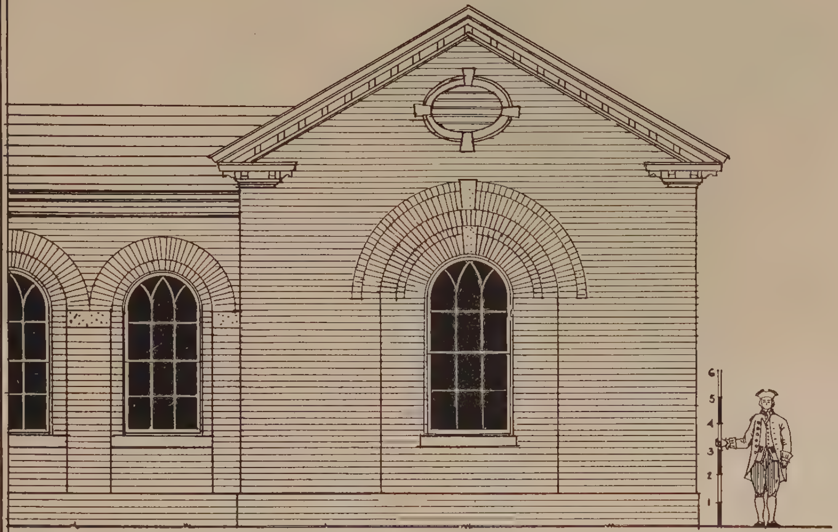


~Mount Claire~
Home of
Charles Carroll
Baltimore, Maryland
Built in 1794

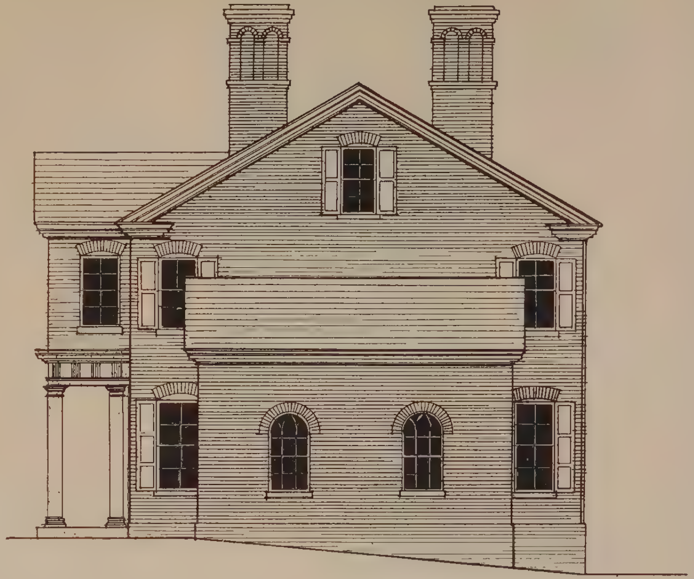
After Drawings by Albert P. Erb
Washington, D.C

Sheet . One

(See Frontispiece.)



Detail of Wing



West Elevation

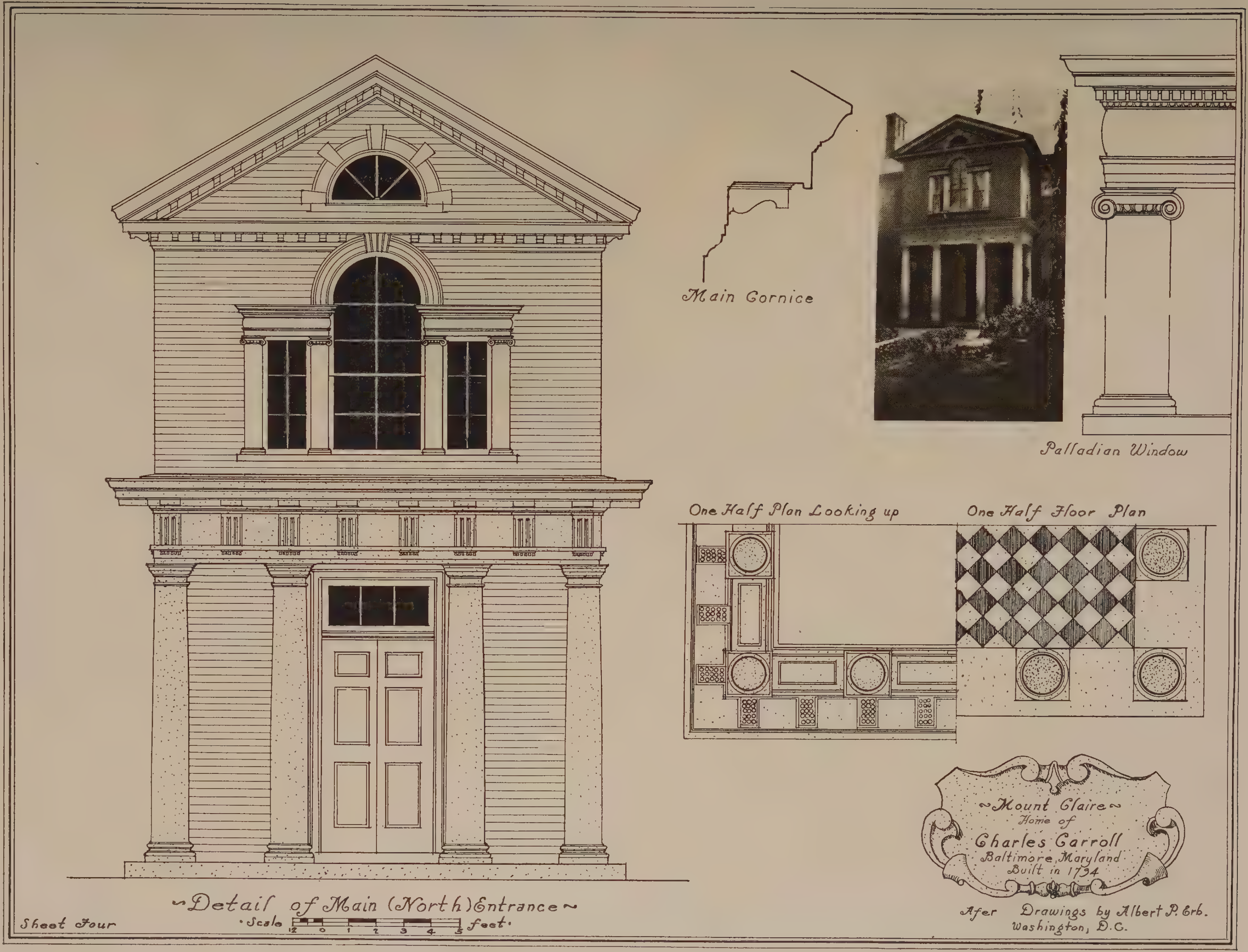
Scale 0 3 6 9 12 feet

~Mount Claire~
Home of
Charles Carroll
Baltimore, Maryland
Built in 1794

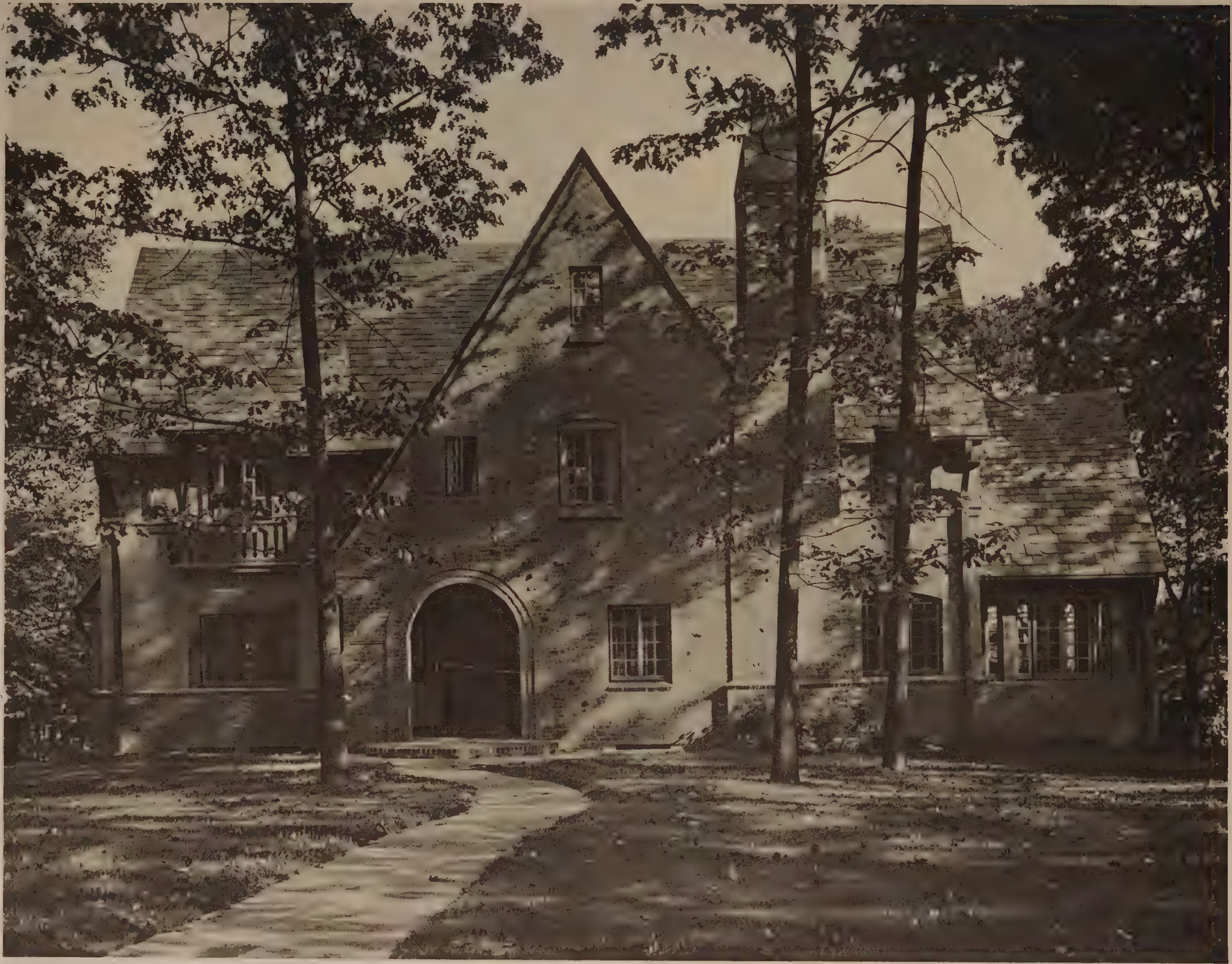
After Drawings by Albert P. Erb
Washington, D.C.

Sheet Three

(See Frontispiece.)

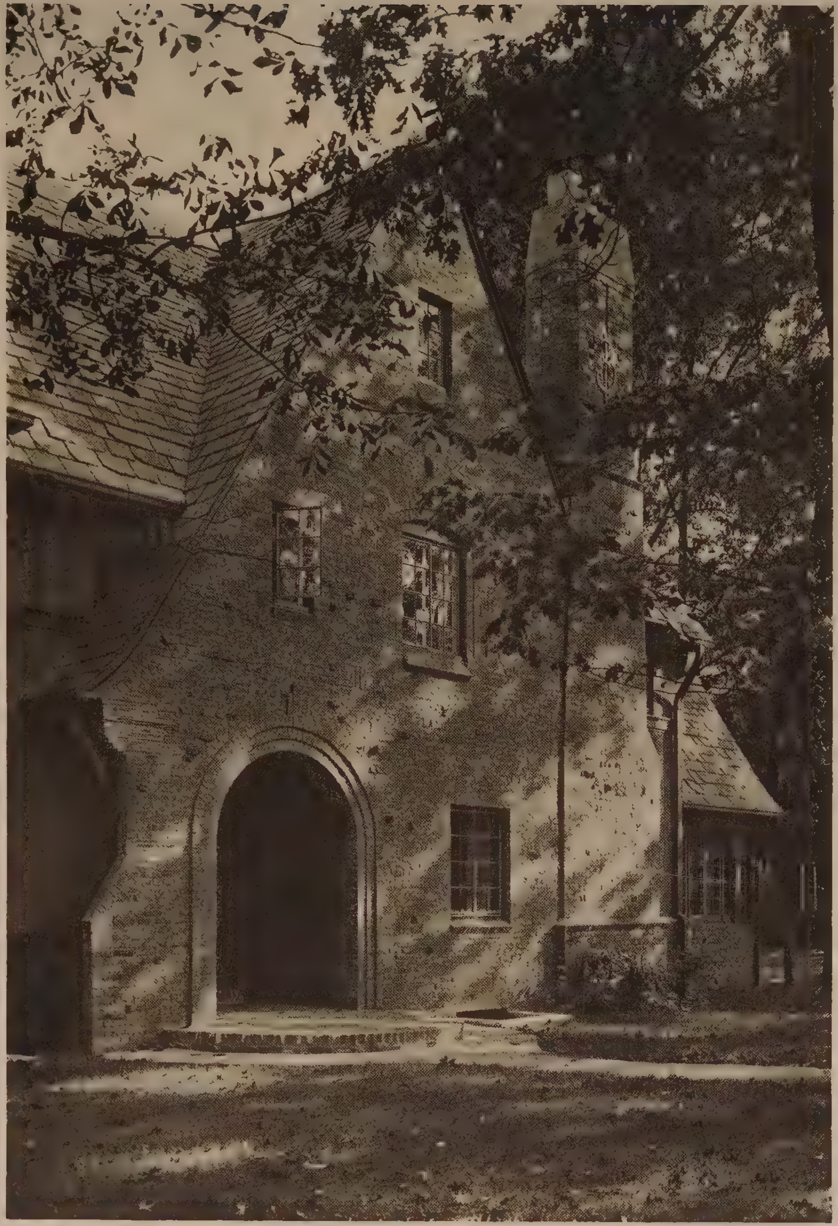


(See Frontispiece.)

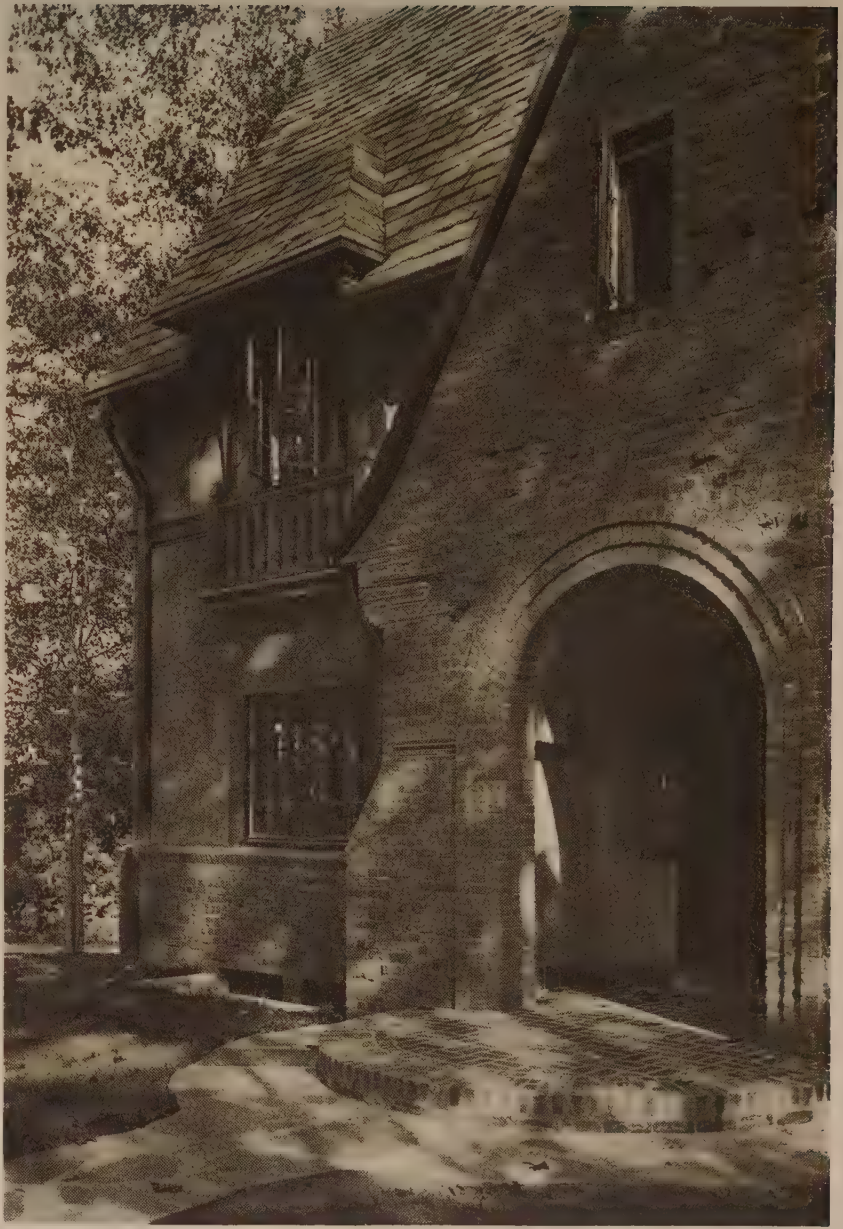


RESIDENCE, H. E. BETTERIDGE, MONTCLAIR, N. J.

C. C. Wendehack, Architect.



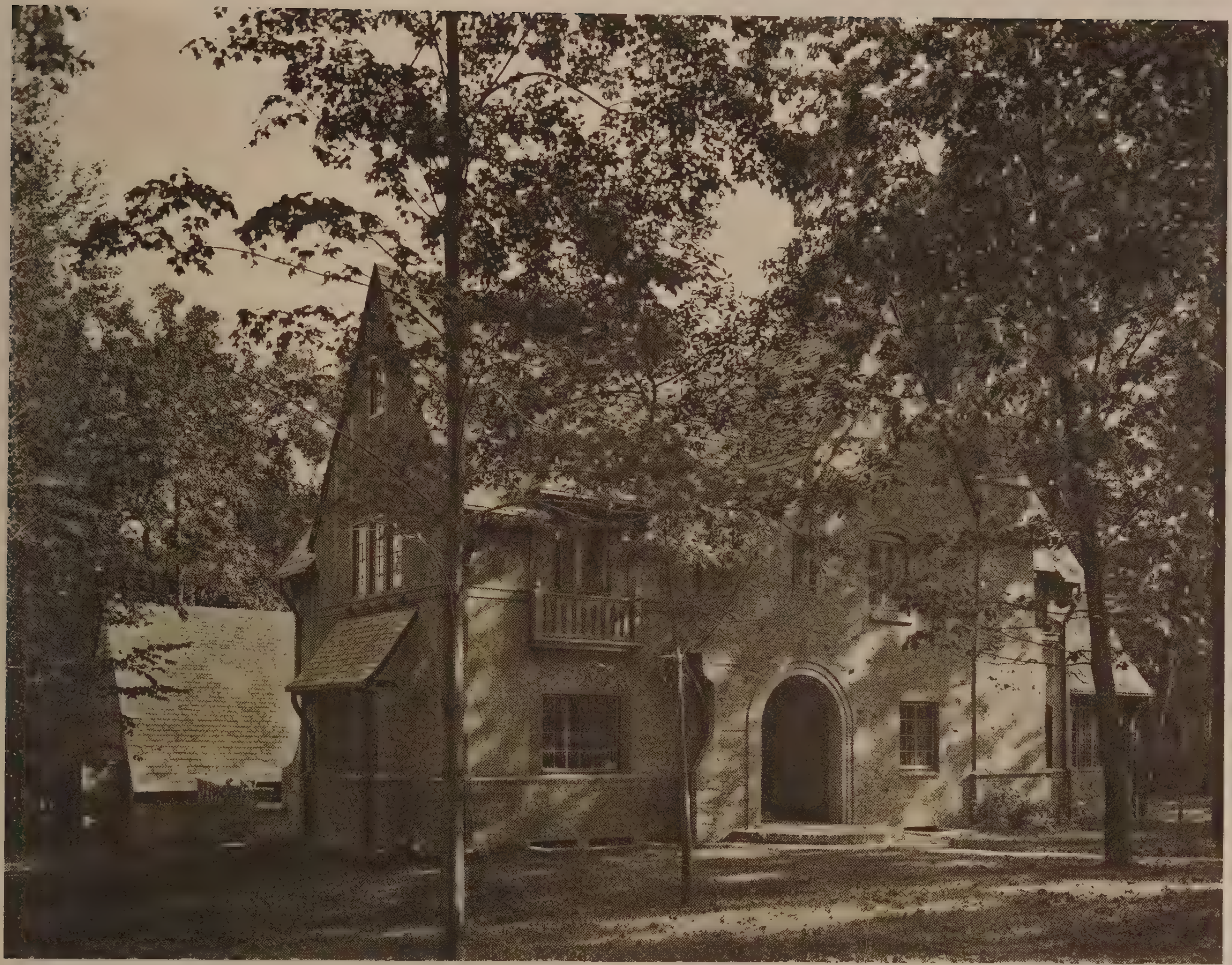
DETAIL.

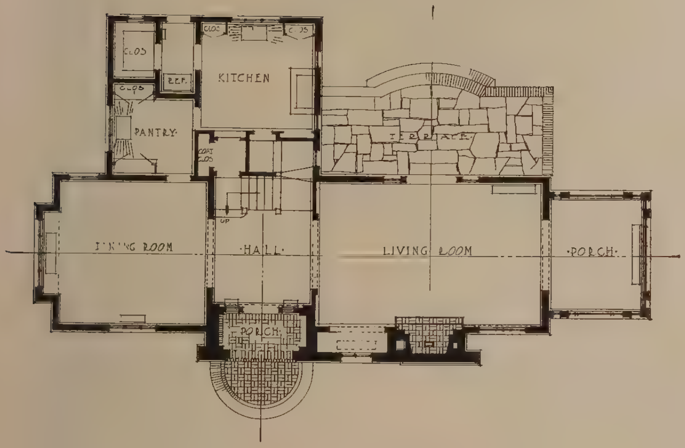


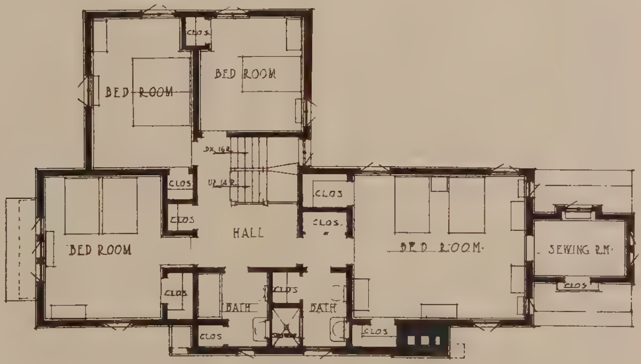
DETAIL.

C. C. Wendehack, Architect.

RESIDENCE, H. E. BETTERIDGE, MONTCLAIR, N. J.

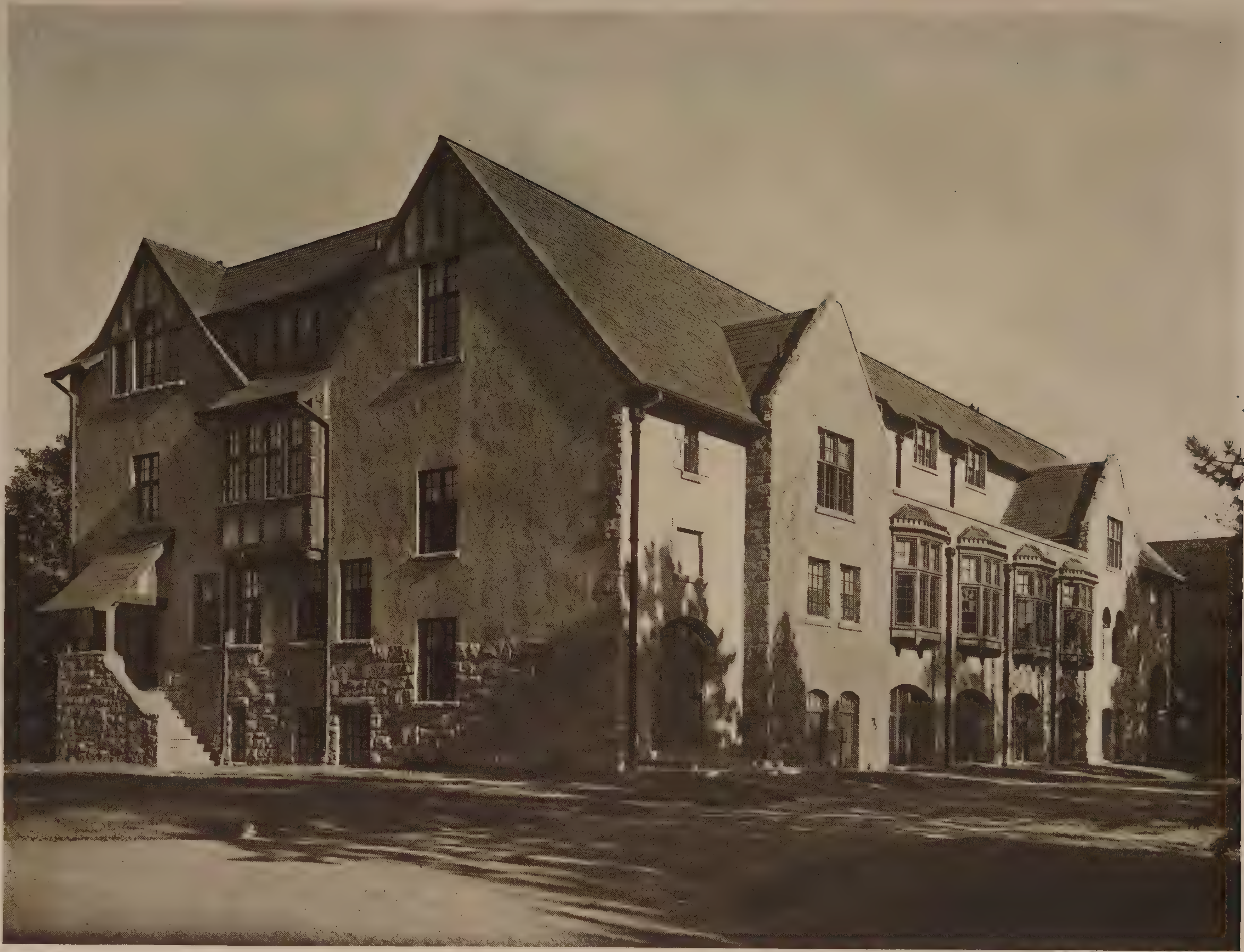






RESIDENCE, H. E. BETTERIDGE, MONTCLAIR, N. J.

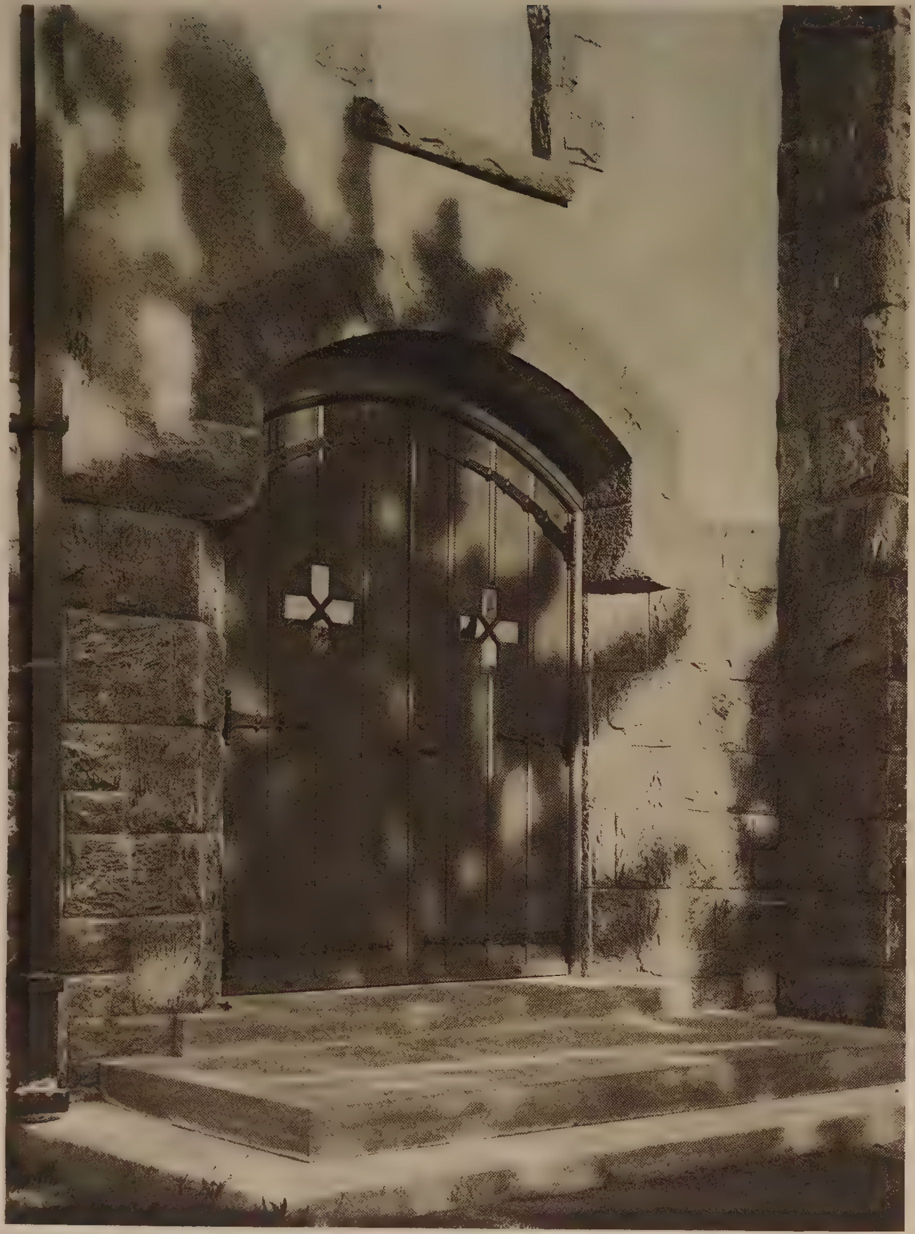
C. C. Wendehack, Architect.



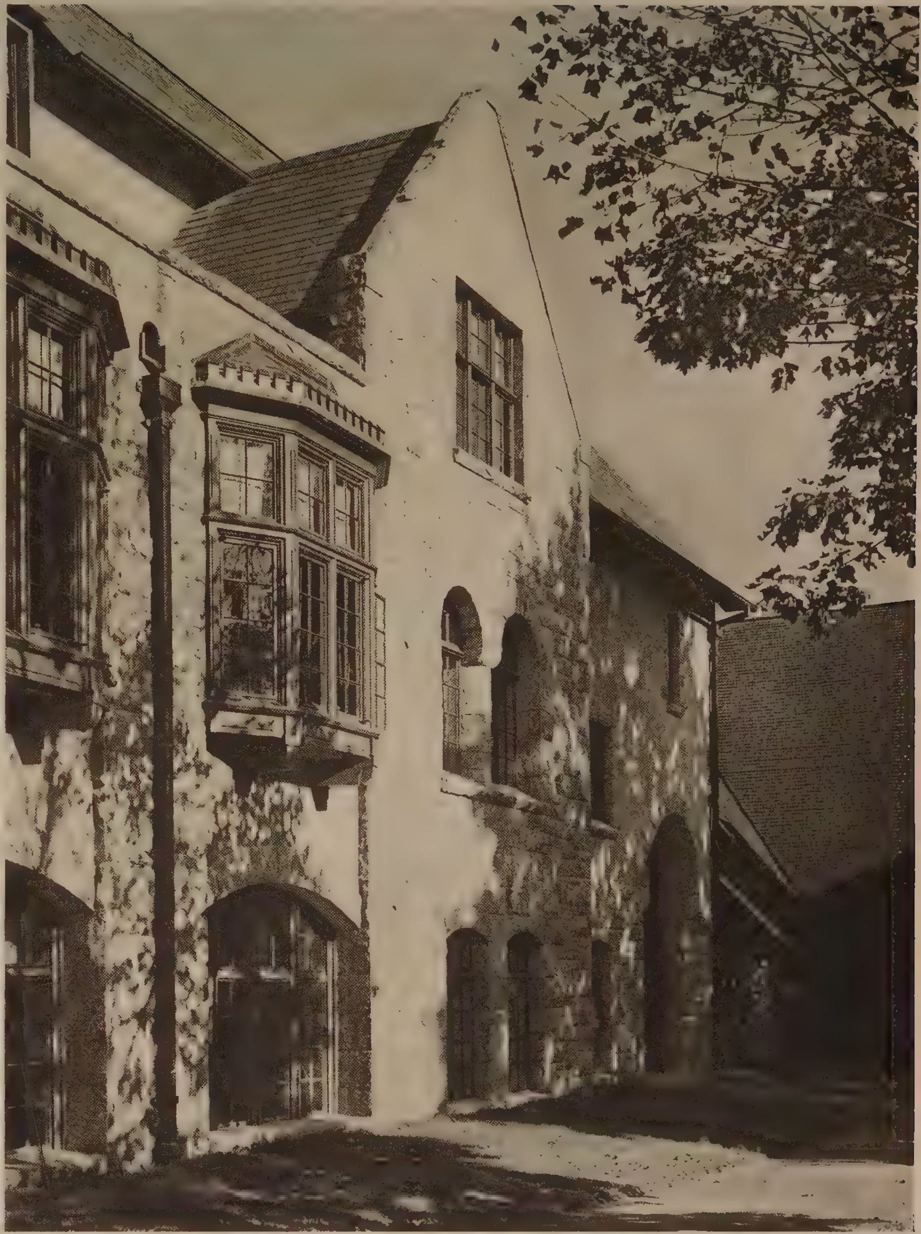
BIBLE SCHOOL AND PARISH BUILDING.

Frederick G. Frost, Architect.

NORTH AVENUE PRESBYTERIAN CHURCH, NEW ROCHELLE, N. Y.



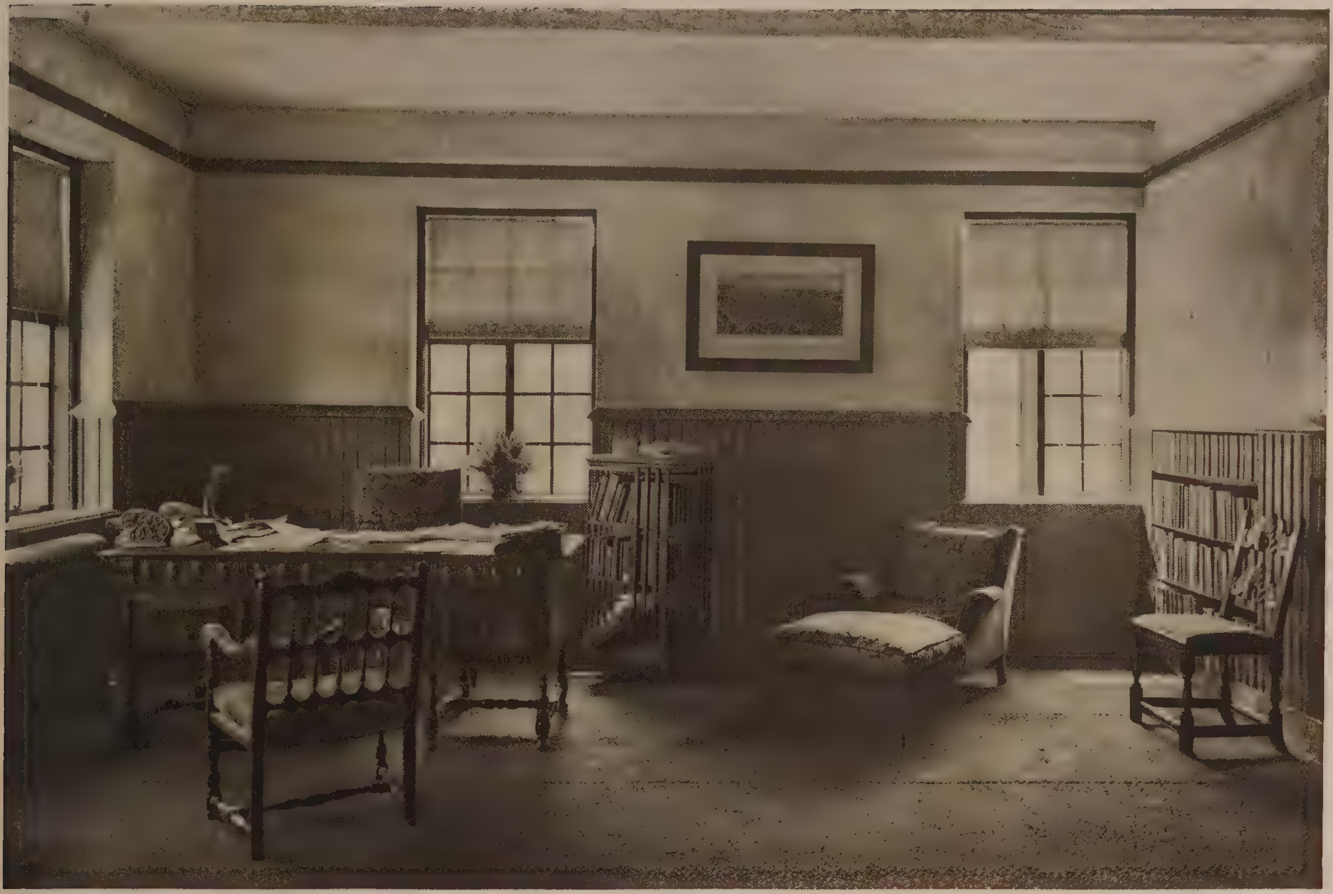
ENTRANCE DOOR.



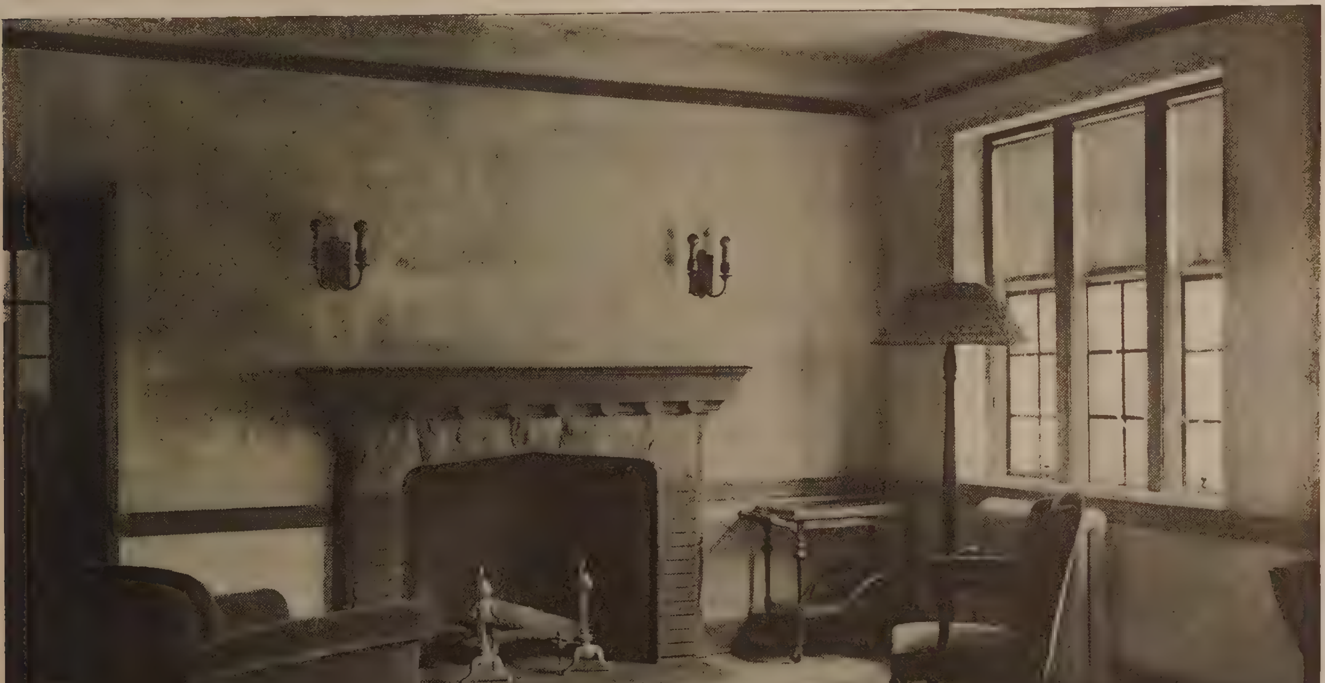
DETAIL.

Frederick G. Frost, Architect.

BIBLE SCHOOL AND PARISH BUILDING, NORTH AVENUE PRESBYTERIAN CHURCH, NEW ROCHELLE, N. Y.



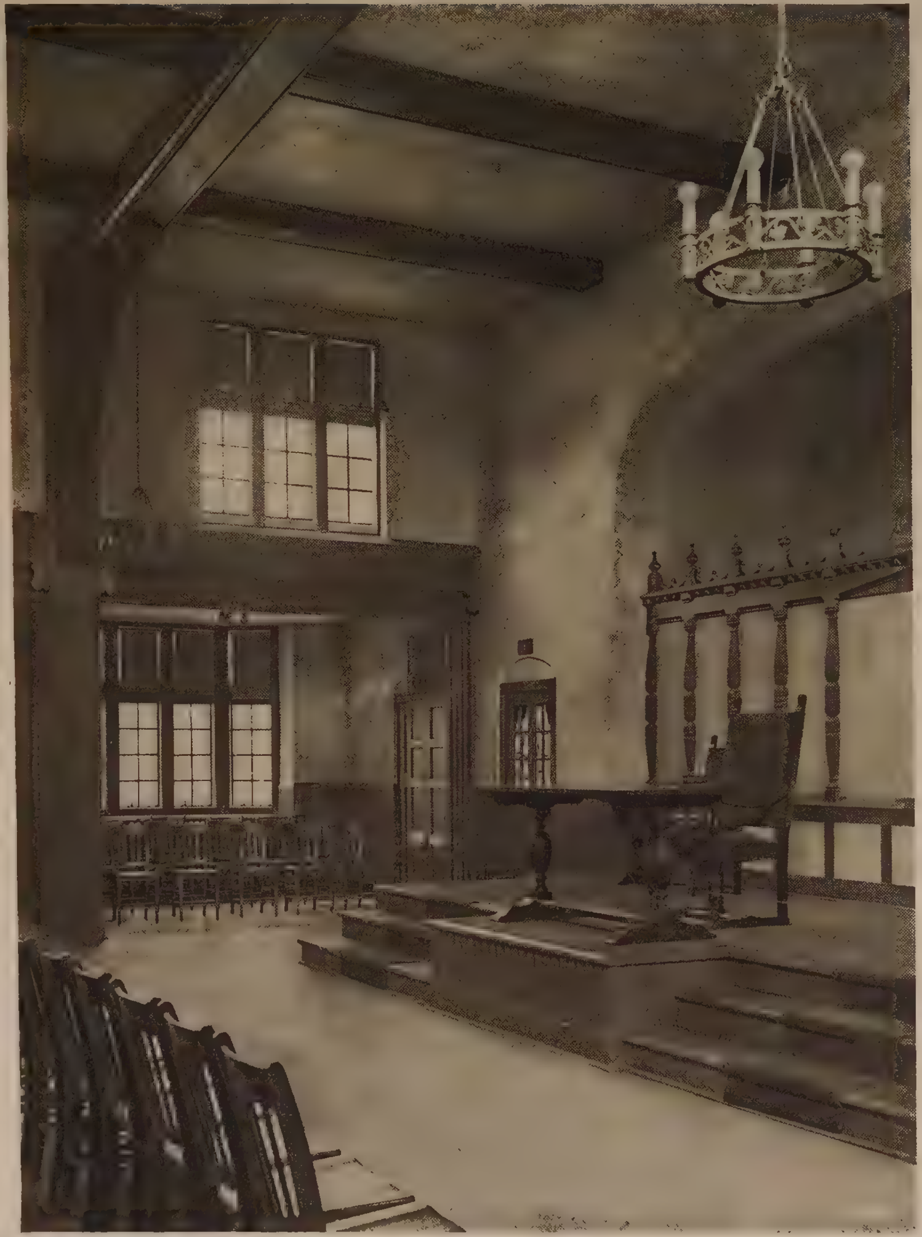
PASTOR'S STUDY AND BOARD-ROOM.



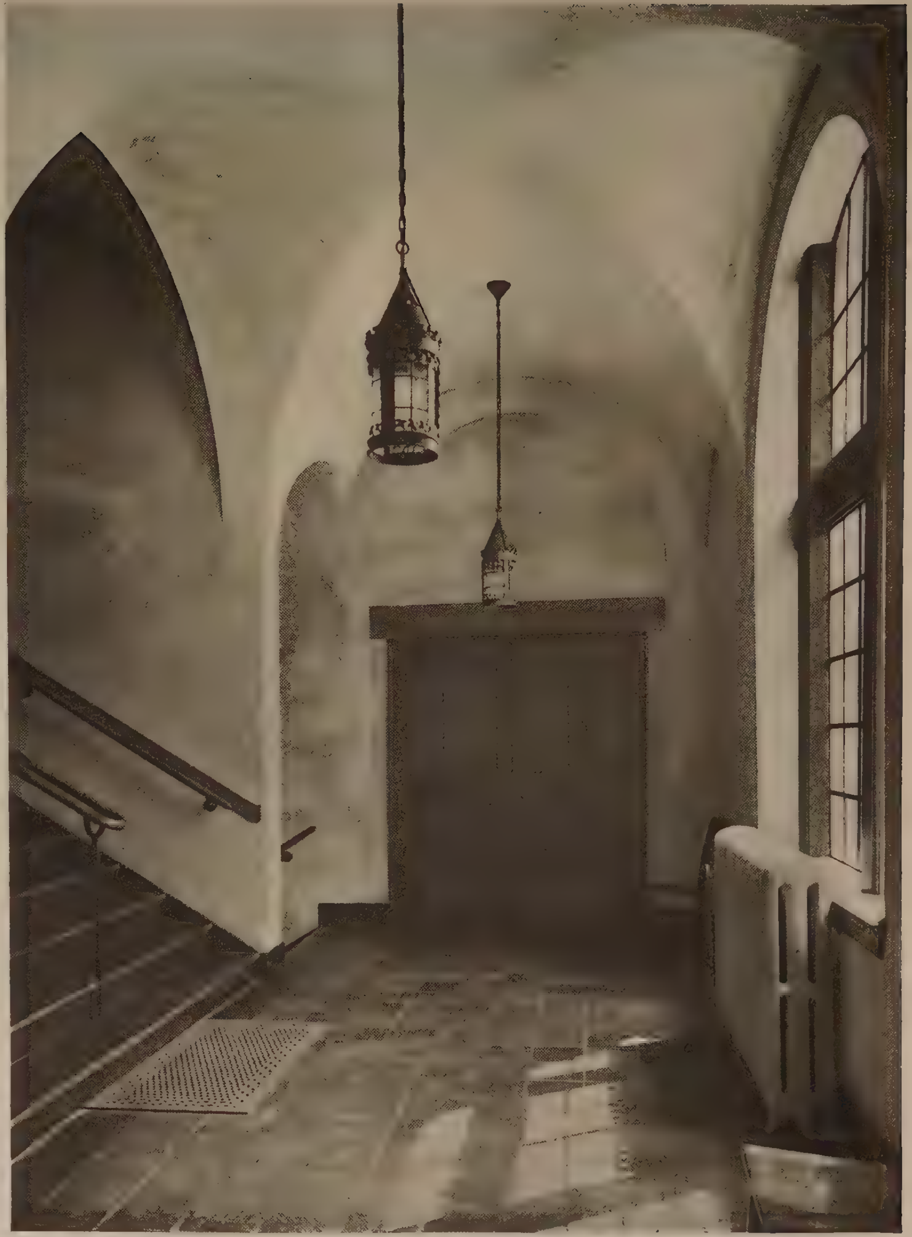
WOMEN'S ROOM.

Frederick G. Frost, Architect.

BIBLE SCHOOL AND PARISH BUILDING, NORTH AVENUE PRESBYTERIAN CHURCH, NEW ROCHELLE, N. Y.



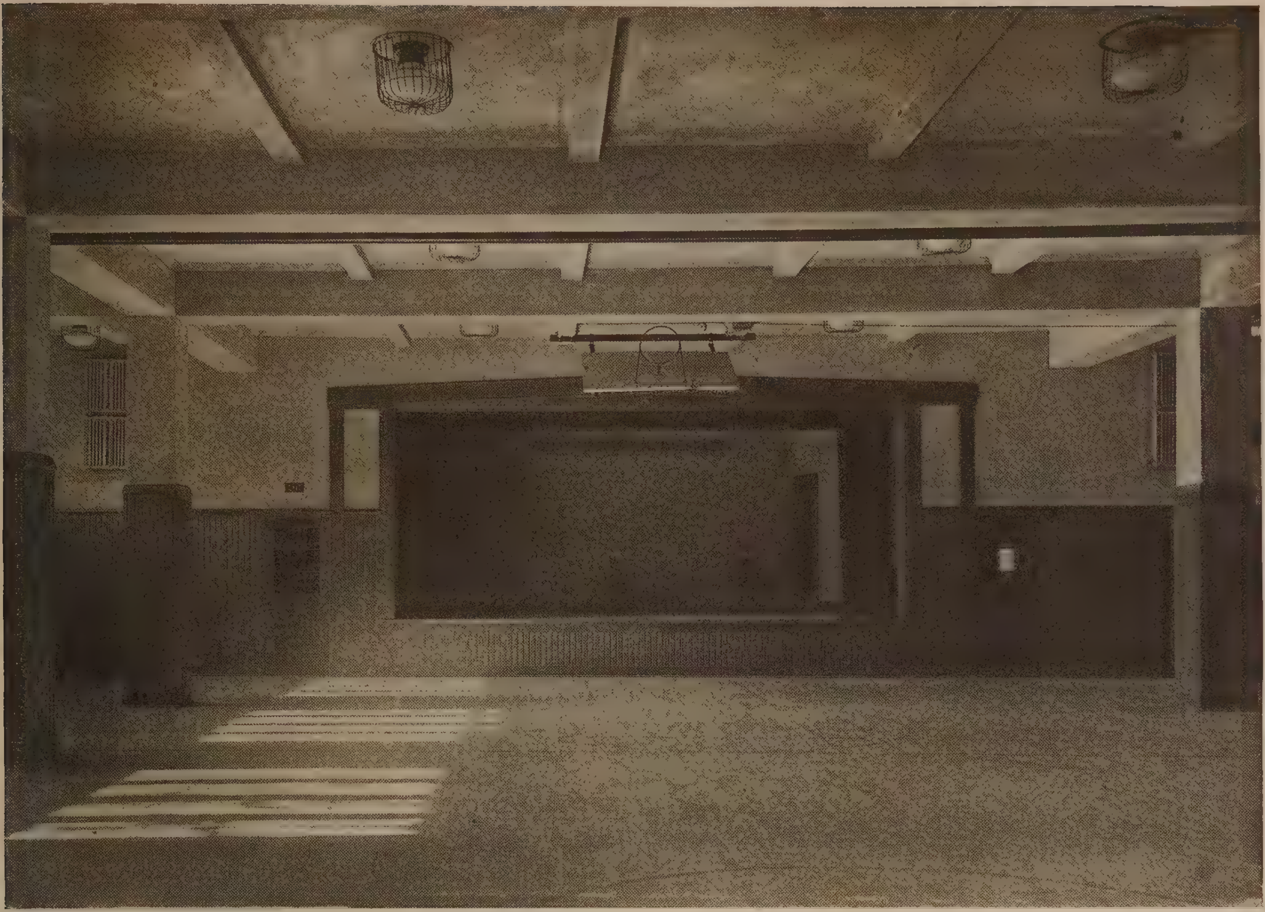
JUNIOR ASSEMBLY-ROOM.



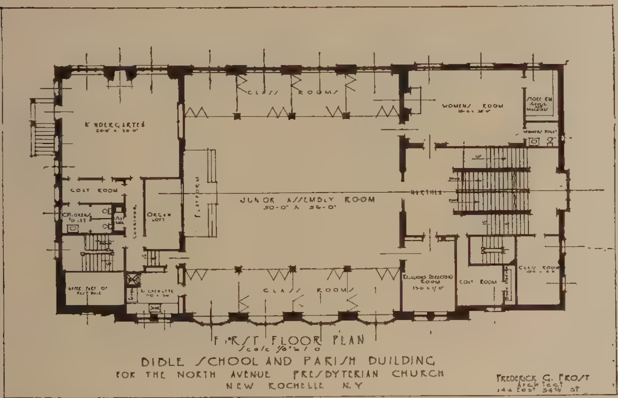
STAIR HALL.

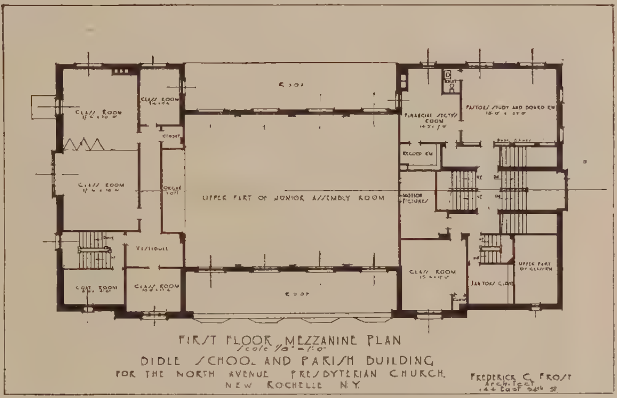
Frederick G. Frost, Architect.

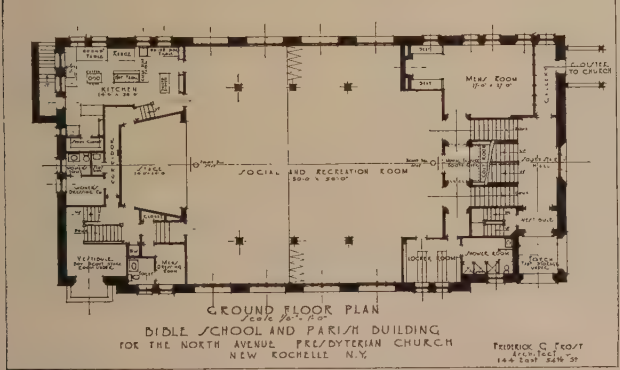
BIBLE SCHOOL AND PARISH BUILDING, NORTH AVENUE PRESBYTERIAN CHURCH, NEW ROCHELLE, N. Y.

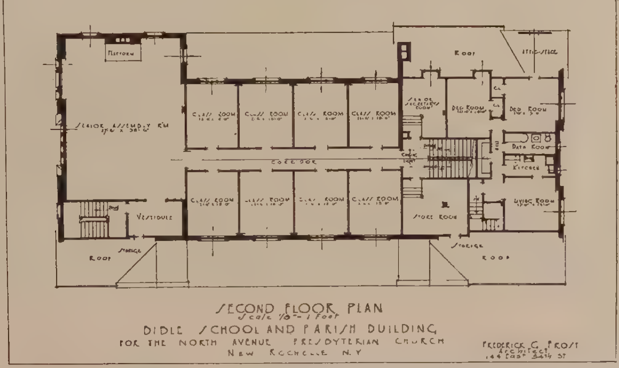


SOCIAL AND RECREATION ROOM, GROUND FLOOR.



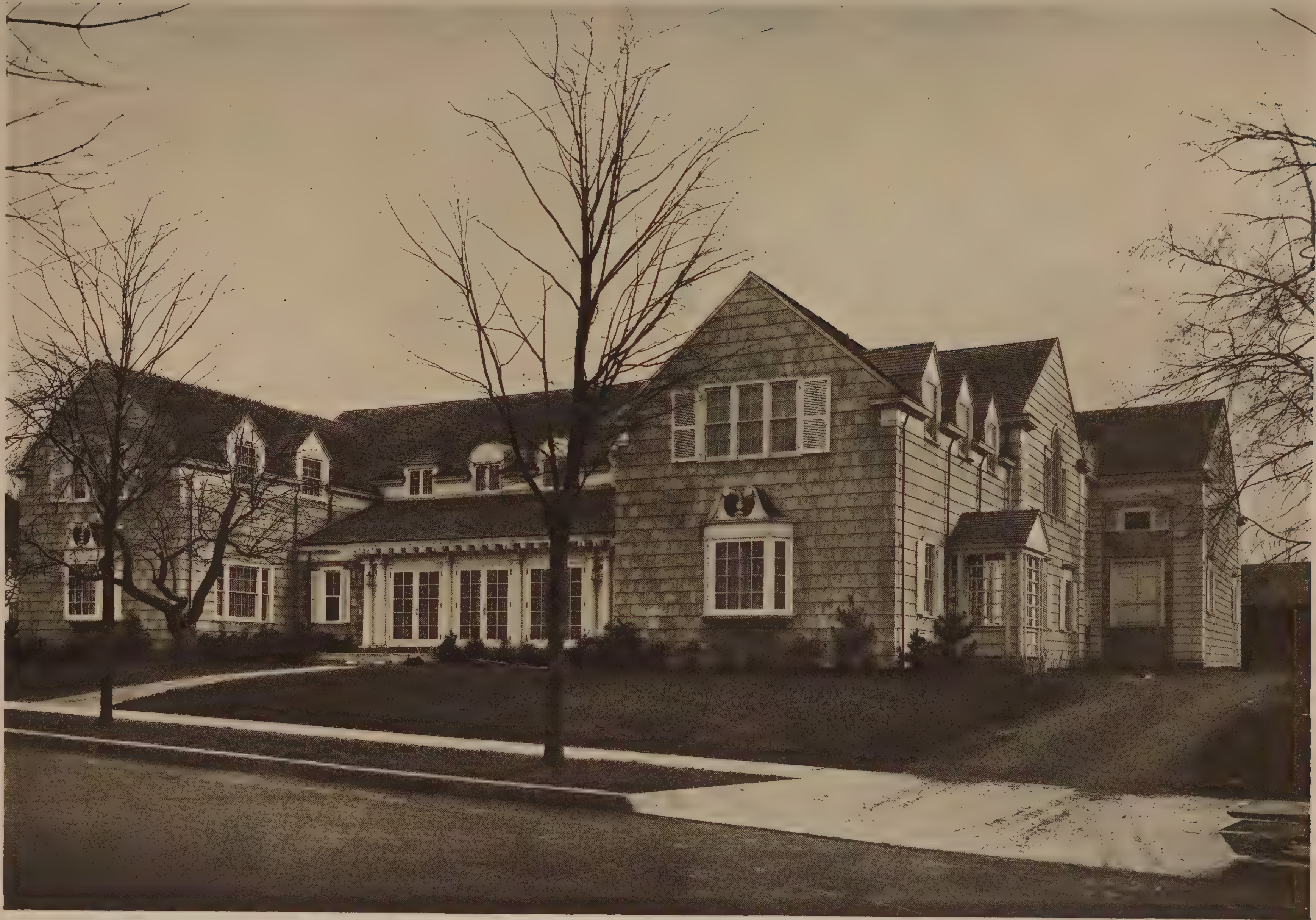

ROOF
CLASS ROOM
UPPER PART OF JUNIOR ASSEMBLY ROOM
VESTIBULE
COAT ROOM
CLASS ROOM
ROOF
FIRST FLOOR MEZZANINE PLAN
Scale 1/8"=1'0"
BIBLE SCHOOL AND PARISH BUILDING
FOR THE NORTH AVENUE PRESBYTERIAN CHURCH
NEW ROCHELLE N.Y.
FREDERICK G. FROST
Architect
144 East 34th St





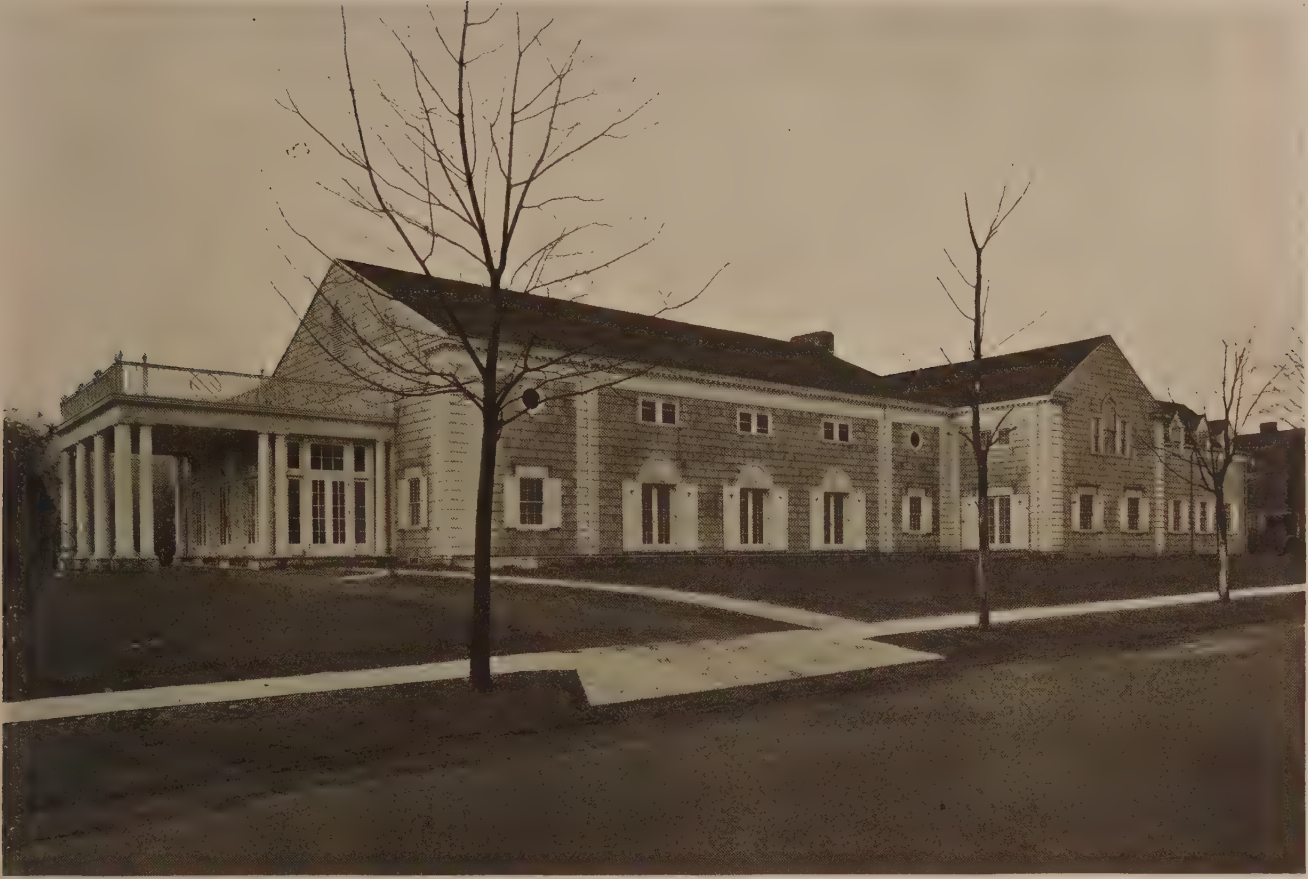
BIBLE SCHOOL AND PARISH BUILDING, NORTH AVENUE PRESBYTERIAN CHURCH, NEW ROCHELLE, N. Y.

Frederick G. Frost, Architect.

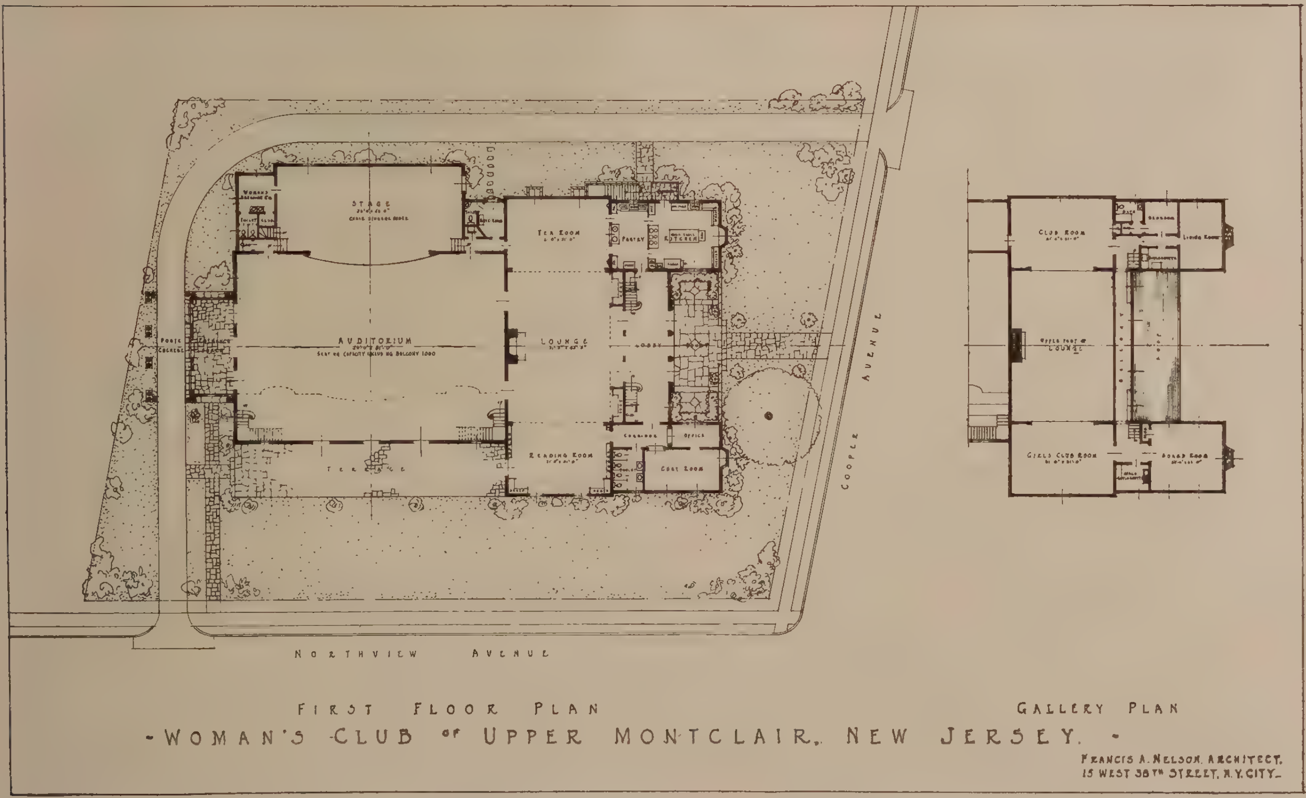


COOPER AVENUE FAÇADE, WOMAN'S CLUB OF UPPER MONTCLAIR, N. J.

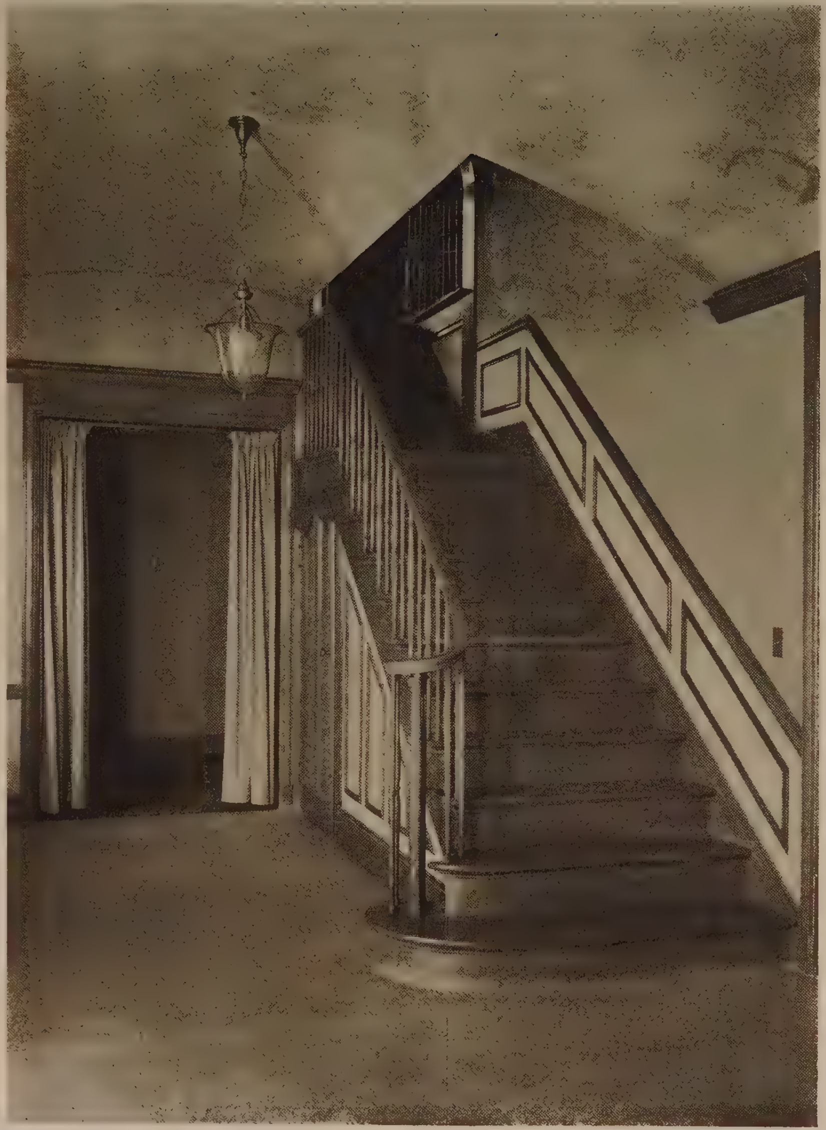
Francis A. Nelson, Architect.



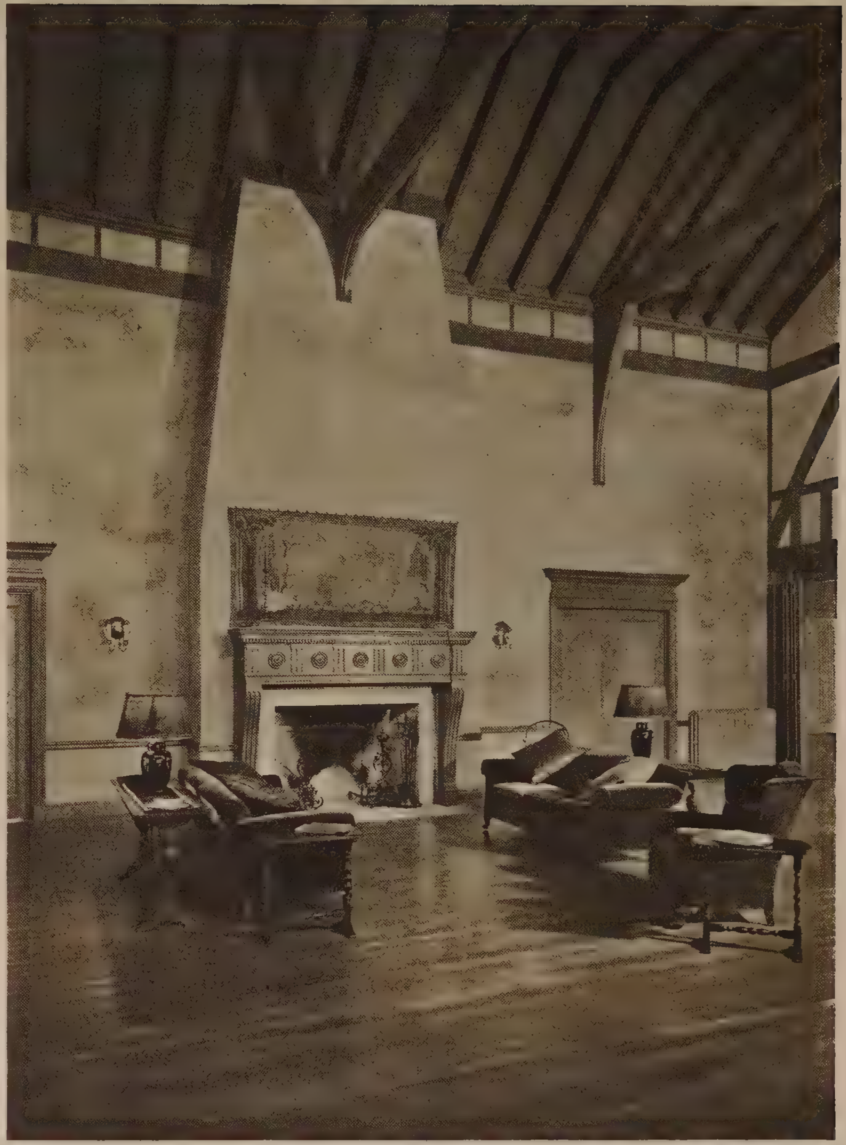
NORTHVIEW AVENUE, SHOWING AUDITORIUM.



WOMAN'S CLUB OF UPPER MONTCLAIR, N. J. Francis A. Nelson, Architect.



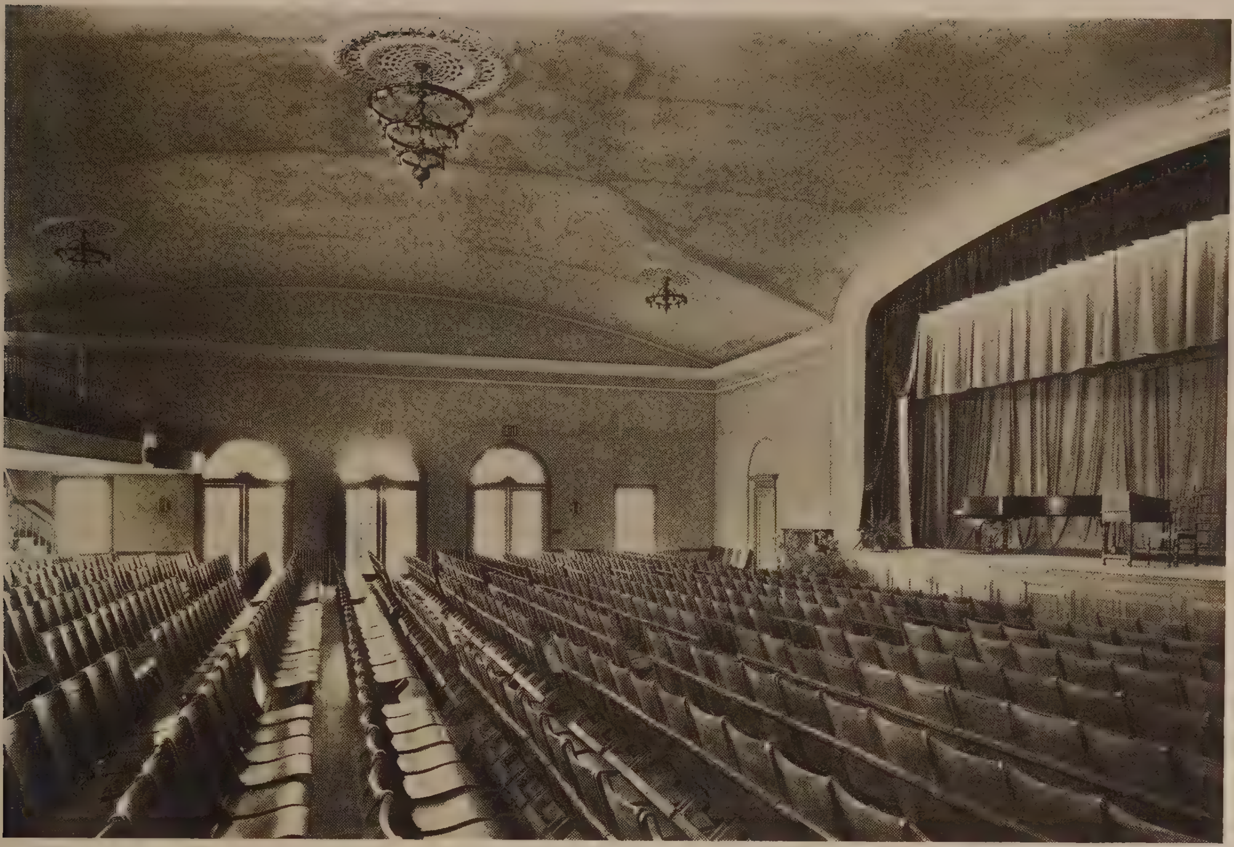
LOBBY AND STAIRCASE.



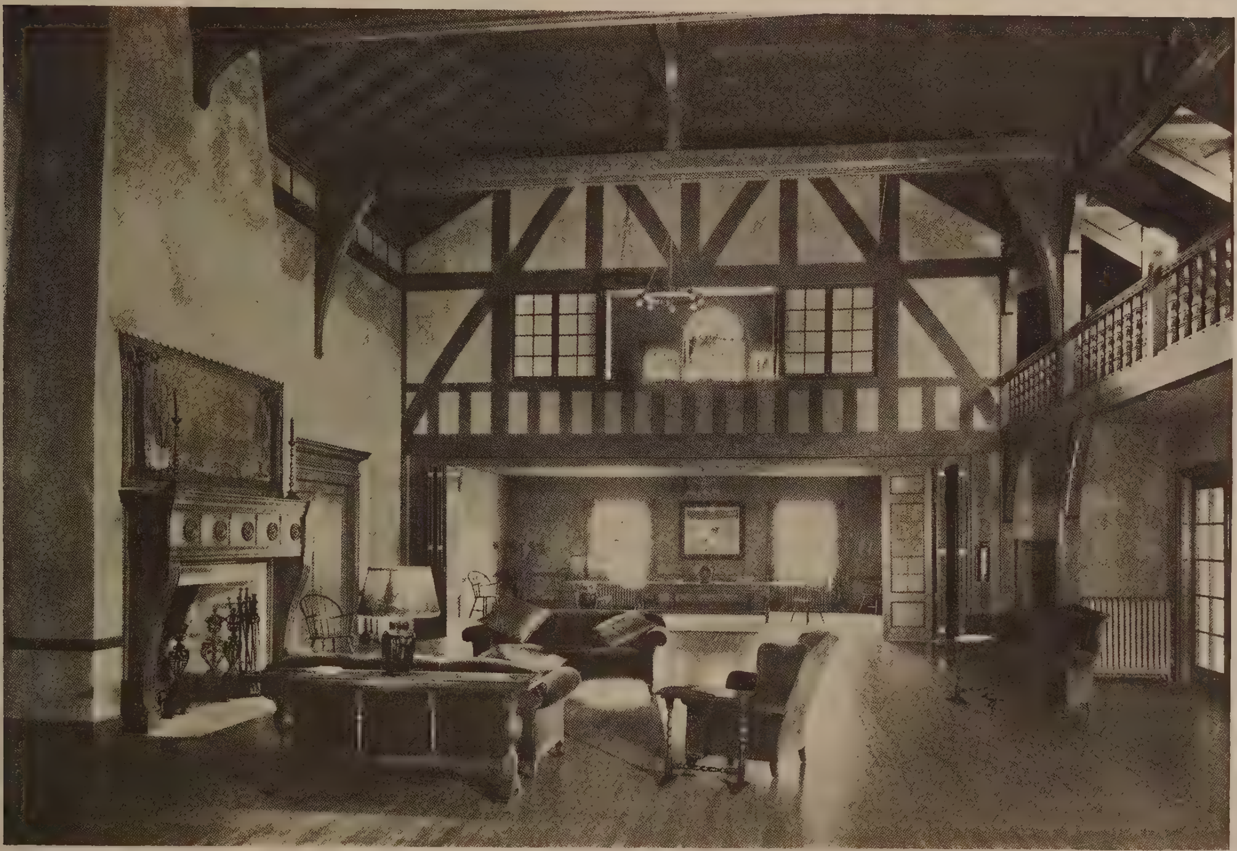
LOUNGE.

Francis A. Nelson, Architect.

WOMAN'S CLUB OF UPPER MONTCLAIR, N. J.



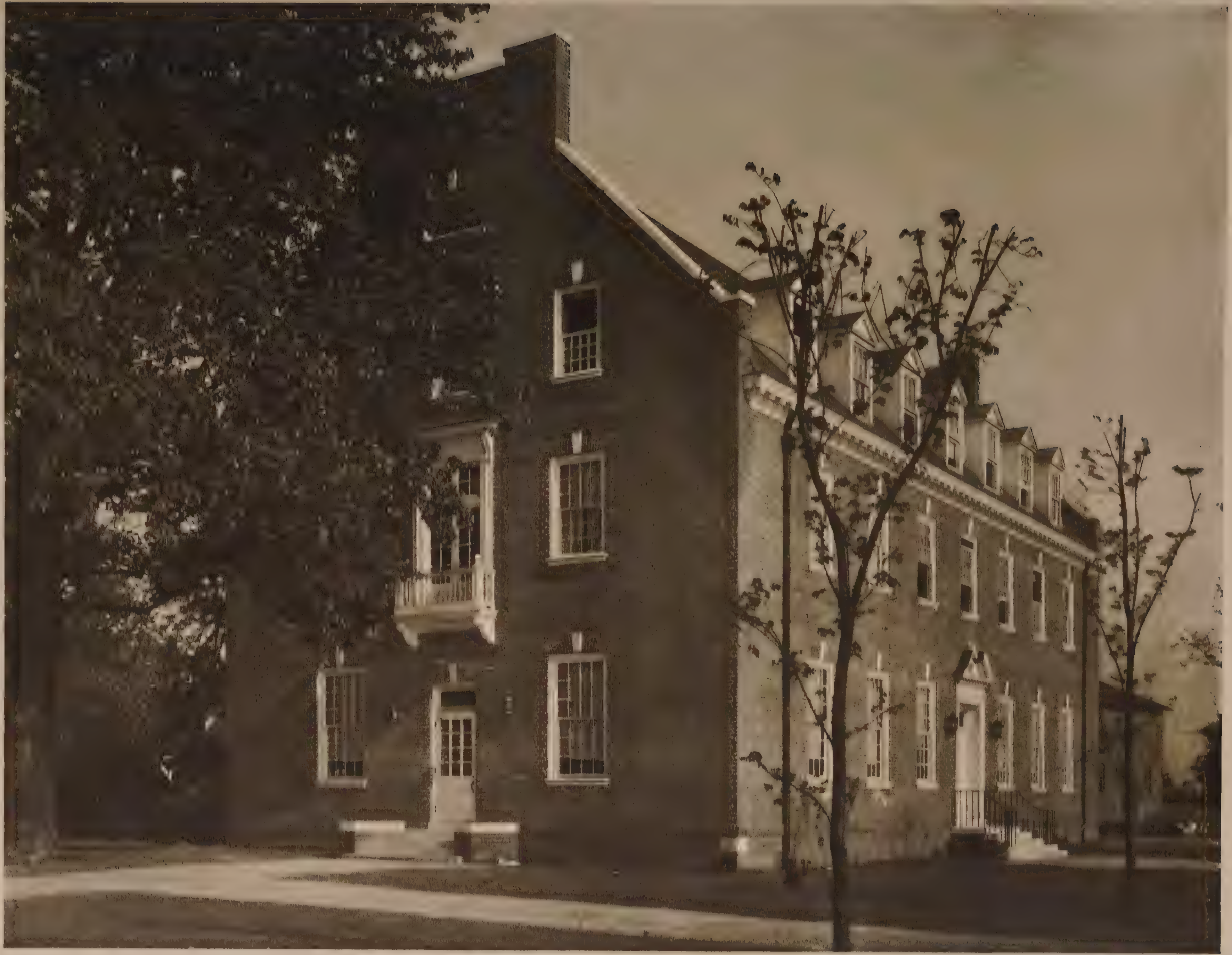
AUDITORIUM.



LOUNGE.

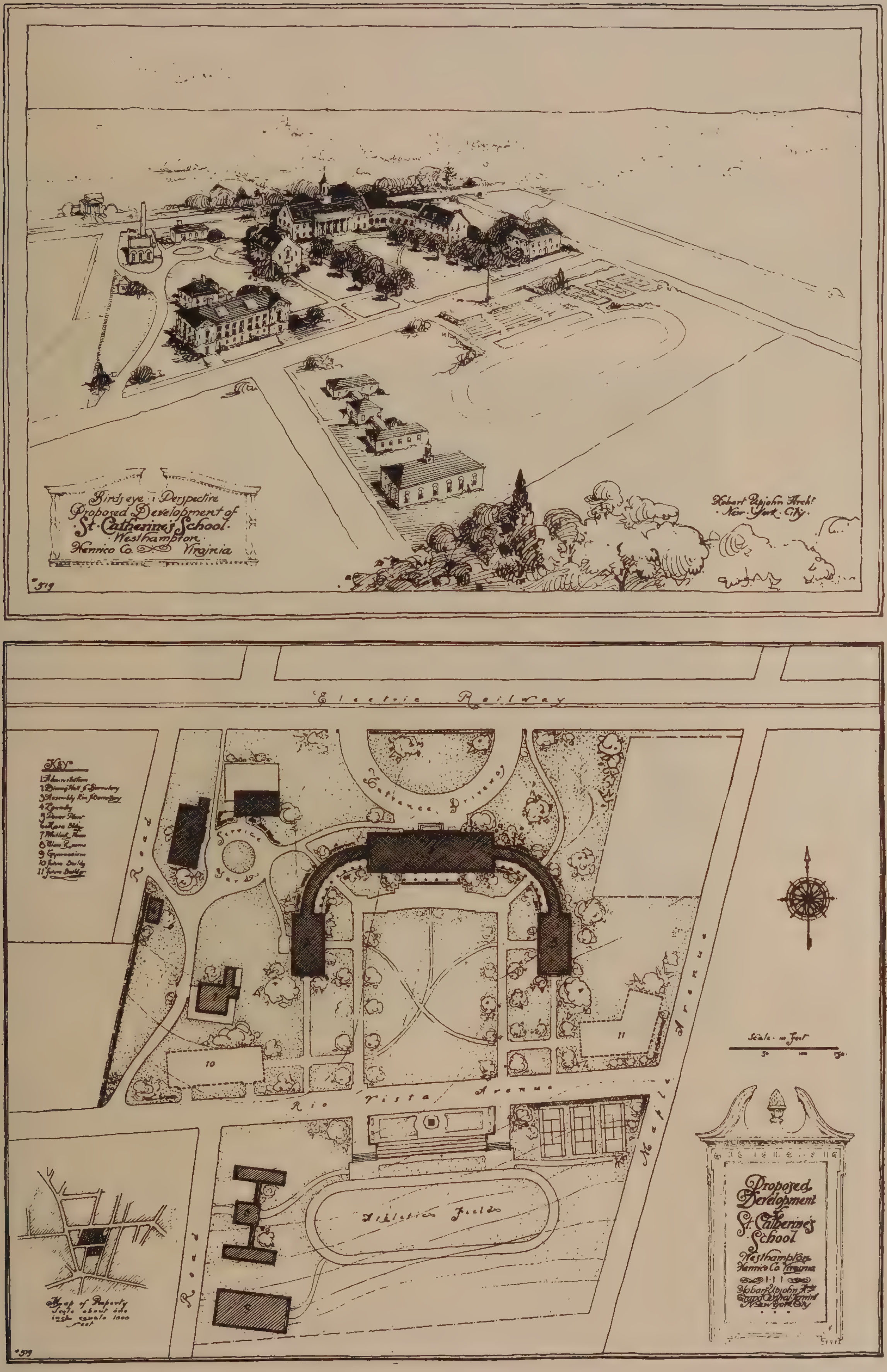
Francis A. Nelson, Architect.

WOMAN'S CLUB OF UPPER MONTCLAIR, N. J.



ST. CATHERINE'S SCHOOL, WESTHAMPTON, VA.

Hobart Upjohn, Architect.



PROPOSED DEVELOPMENT, ST. CATHERINE'S SCHOOL, WESTHAMPTON, VA. Hobart Upjohn, Architect.

A Description of the Development of St. Catherine's School Westhampton, Va.

Hobart Upjohn, Architect

IN the photographs and sketches are shown the new buildings for St. Catherine's School, located at Westhampton, one of the suburbs of Richmond, Va. The diocese has established a series of these schools, under the immediate direction of Bishop Brown, of the Diocese of Virginia, for the particular use of its parishioners. It is the idea to provide a thorough school education for the churchmen of the diocese which will be available at moderate prices.

To this end it was decided to adopt a plan which would be available to relieve the present congested condition of the school, and eventually to develop into a larger, more comprehensive plan. The buildings which the school occupied were non-fireproof, and it was decided that the new buildings should all be fireproof. With this in mind, the general scheme shown in the sketches was to construct a group of buildings connected by little arcades, which would give sufficient floor space to accommodate all the requirements. A unit was adopted as a module for the whole school, which was based upon the seating of the largest individual class in desk formation.

Detail.

According to the plot plan this building is known as the Dining-Hall and Dormitory, and the first floor is laid out so that, with the very slightest alterations, this can be turned into the dormitory. At present the dining-hall is one of the group of small buildings shown in the bird's-eye perspective, but owing to the increase of enrolment the first floor is laid out for classrooms.

The problem was a very interesting one, and, using an axis of the Administration Building, the campus is surrounded by the three main buildings with connecting wings, these connecting wings containing individual rooms to be used as music-rooms, etc.

On this axis, which is the same as the axis of the campus, the athletic field is laid out on the other side of the road, and, although a distinctly separate feature, due to the separation by the road, still the ground falls off gradually, and continues on so that at a distance of about half a mile, where there is one of the main roads leading to the Richmond Country Club, the view of this group will be most pleasing when complete.

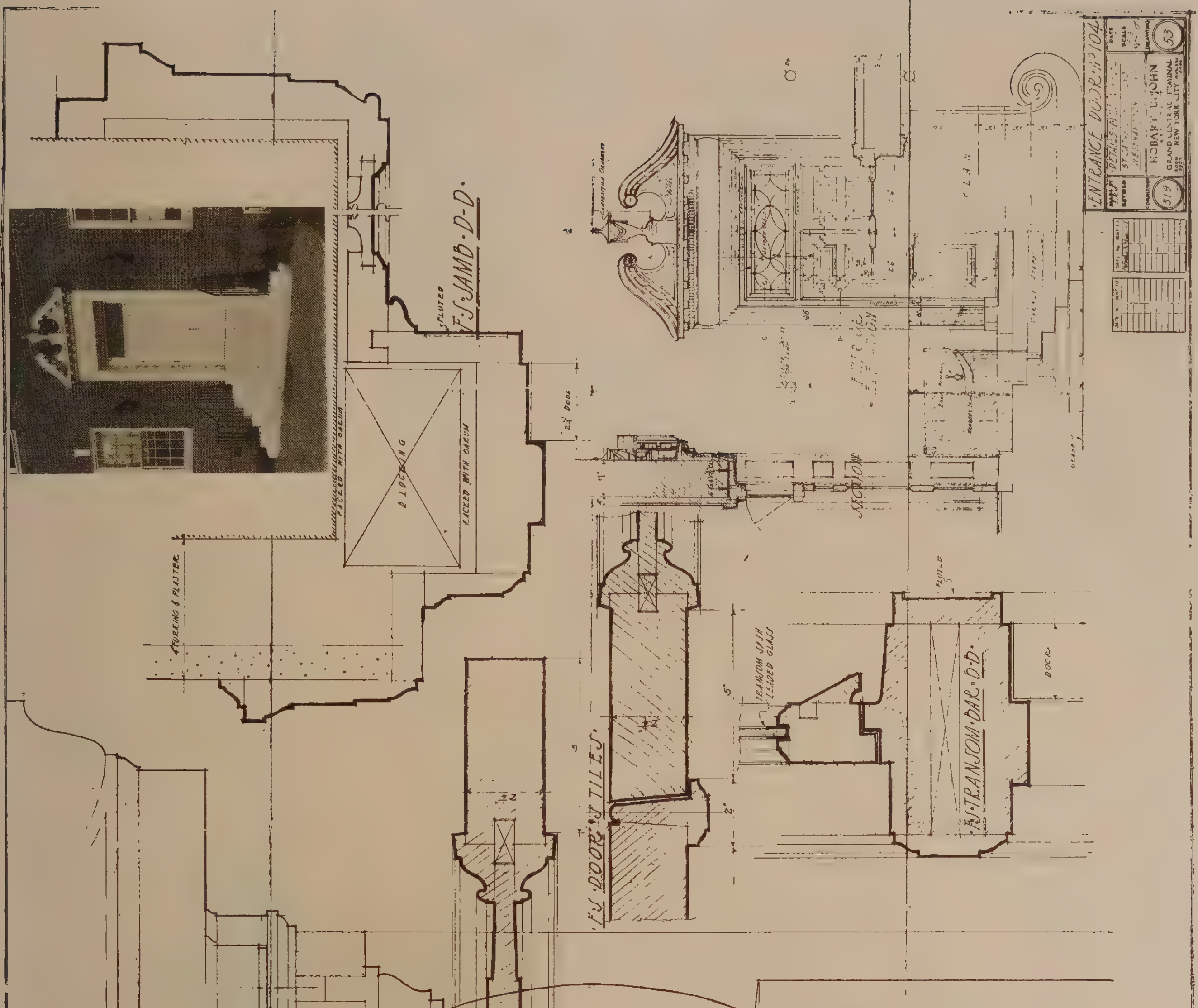
The building is a fireproof-floor-and-partition construction, a local brick being used for the exterior. The Flemish bond was adopted, and the brick selected is a sort of clinker colonial, which, together with the marble copings, steps, etc., gives a very pleasing result.

Columns were placed down the centre of the building, and the floor space in this way left entirely free of any partitions, which could be increased or decreased at will as conditions changed. This unit of depth was worked out so that it would also accommodate double bedrooms with closets on the inside. By the removal of all the partitions the same building will eventually turn into the dining-hall of the group. The building immediately opposite the one first built will accommodate the auditorium, and possibly additional dormitories. The central building will be the main classroom building, with administration offices.

It was also desired that a feeling of the home should be kept in the style of the whole group. The Southern colonial was adopted, and its principles of hominess were applied to produce this effect.

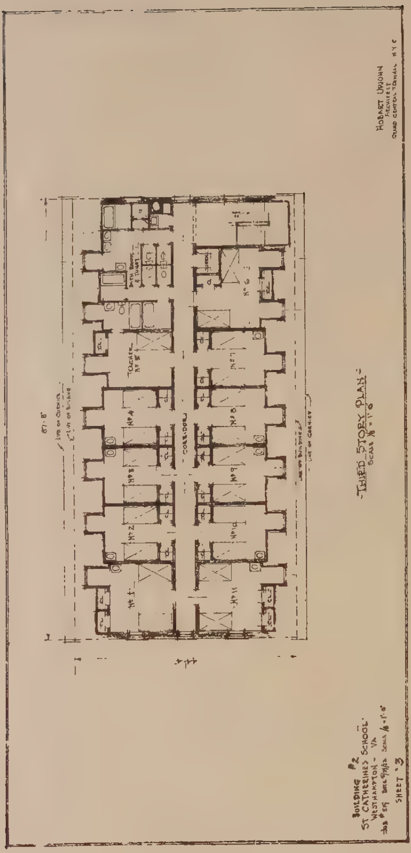
On the outside a large athletic field was worked out, with its bleachers on one side, and formal steps and gardens worked down to it.

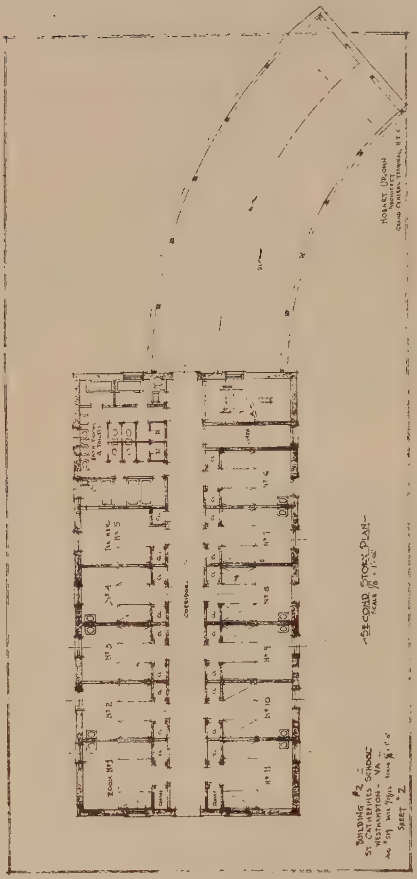
It is the intention to have one of the most complete school groups of its kind.

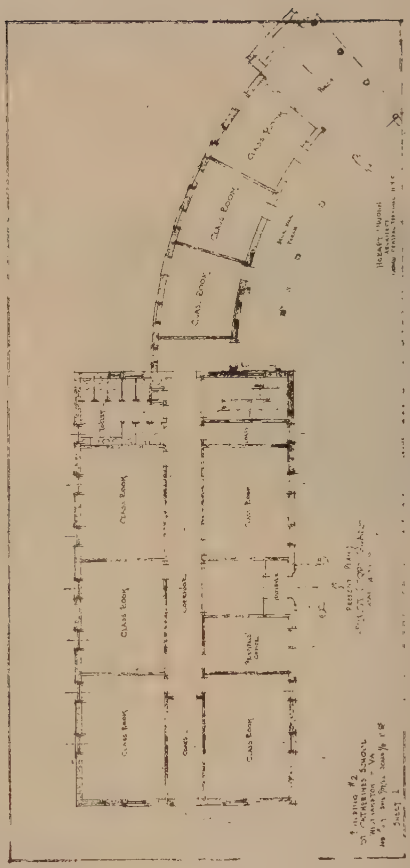


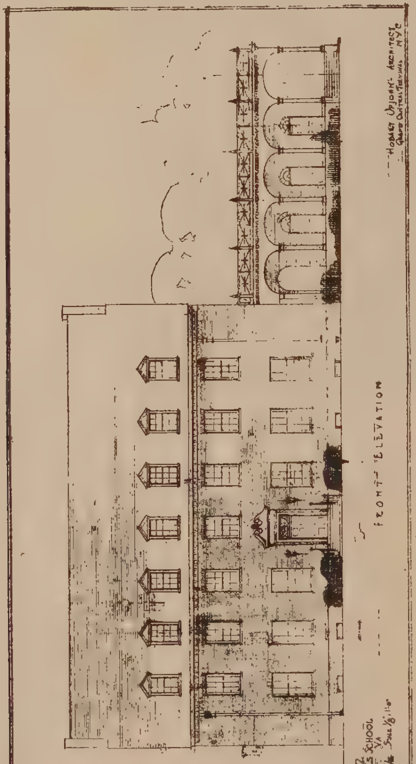
DETAIL, ENTRANCE DOOR, ST. CATHERINE'S SCHOOL, WESTHAMPTON, VA.

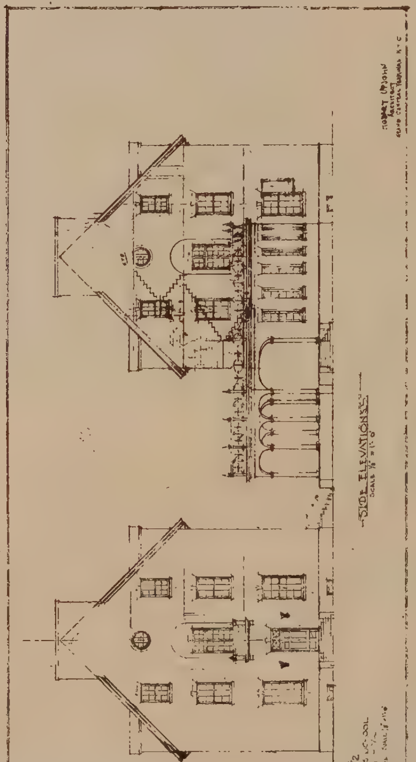
Hobart Upjohn, Architect.





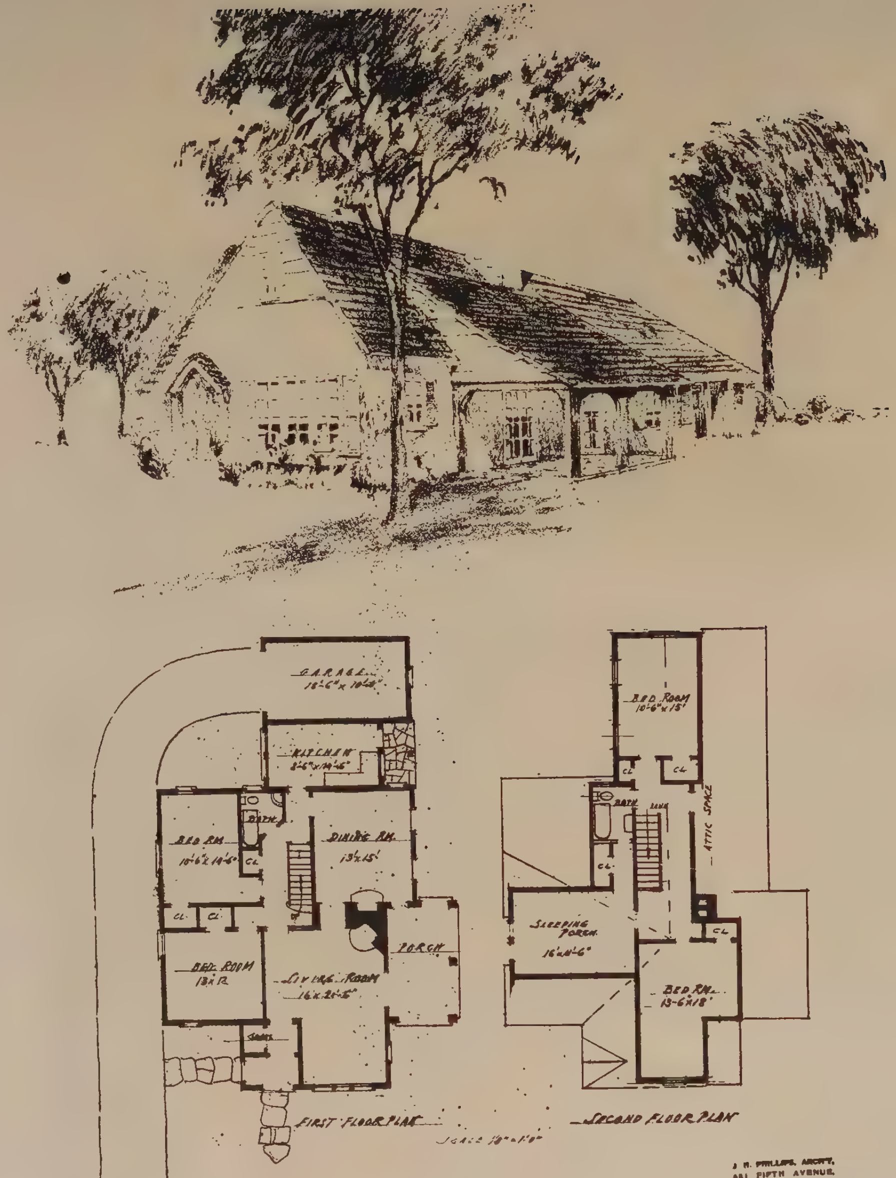






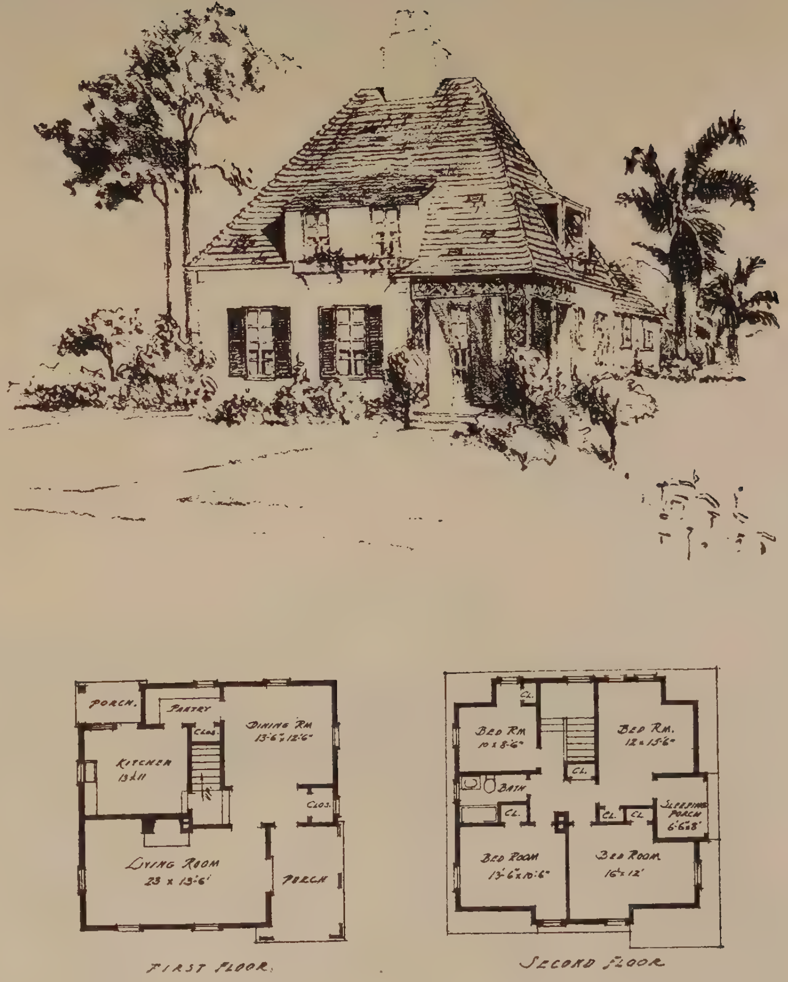
Hobart Upjohn, Architect.

ST. CATHERINE'S SCHOOL, WESTHAMPTON, VA.



COTTAGE.

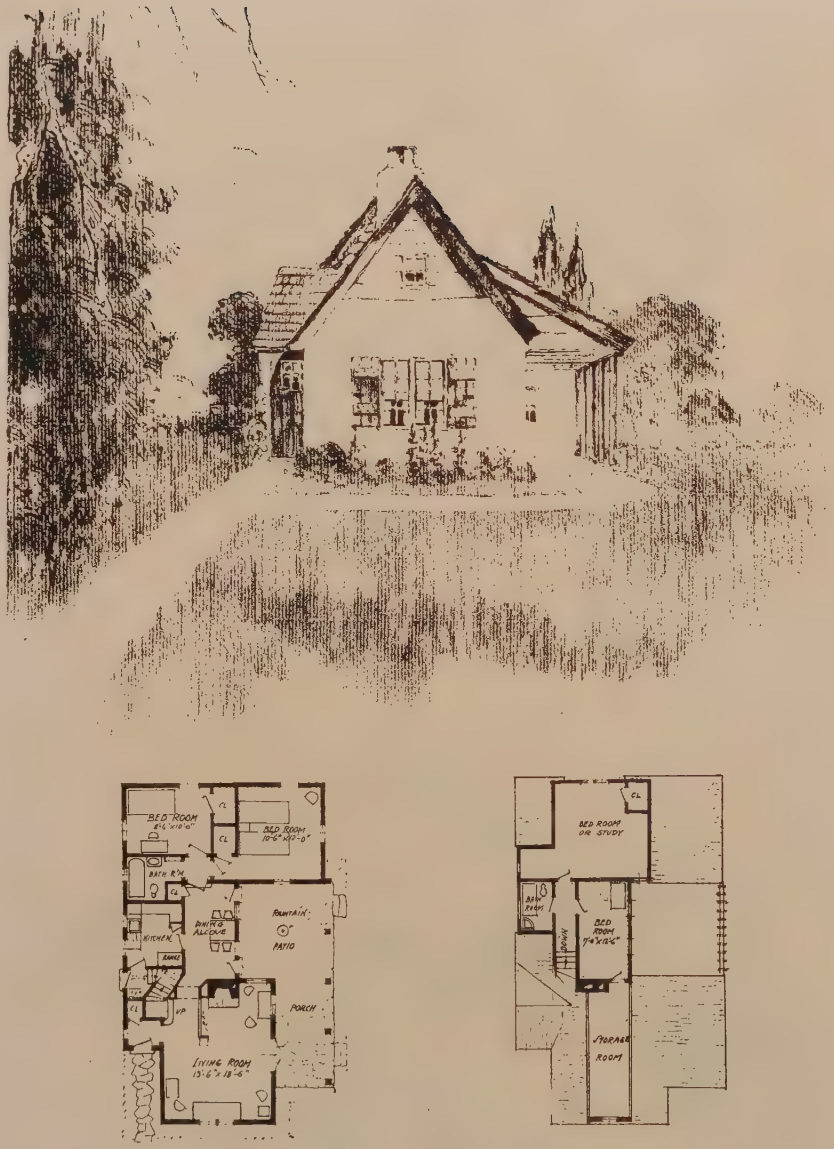
J. H. PHILLIPS, ARCHT.
681 FIFTH AVENUE,
NEW YORK CITY.



SKETCH of FRENCH COTTAGE TYPE.
for JONES-BLANK REALTY COMPANY
TAMPA FLORIDA

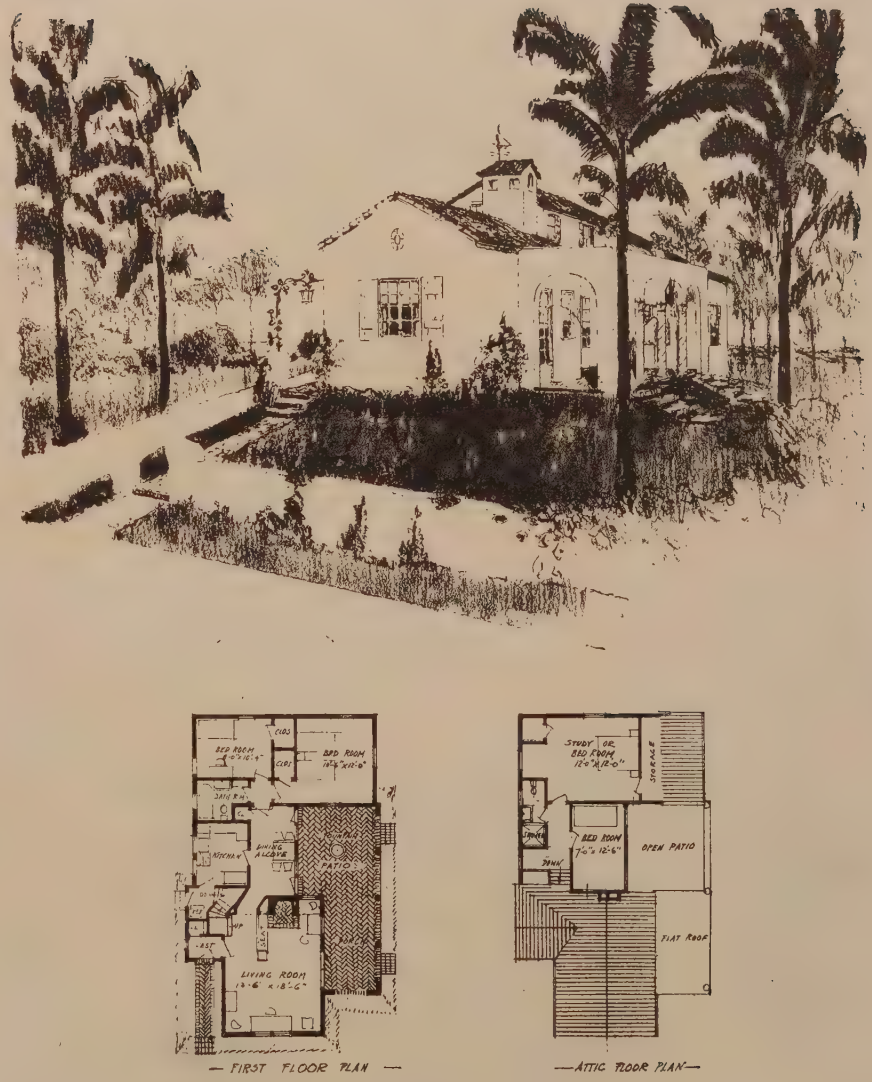
J. H. PHILLIPS, ARCHT.
681 FIFTH AVENUE,
NEW YORK CITY.

J. H. Phillips, Architect.



ENGLISH COTTAGE for HAWORTH ENGINEERING Co
HAWORTH. N.J.

J. H PHILLIPS, ARCHT
681-5TH AV N.Y.C.



SPANISH COTTAGE for
H. HOWARD O'BRIEN, ESQ.
SARASOTA - FLORIDA

J. H PHILLIPS; ARCHITECT
681 5TH AVE NEW YORK CITY.

J. H. Phillips, Architect.

Gateways from Florence to Venice

By Folger Johnson

Photographic Studies Made in Northern Italy Illustrating the Variety and Interest to be Found in the Formal Gateway

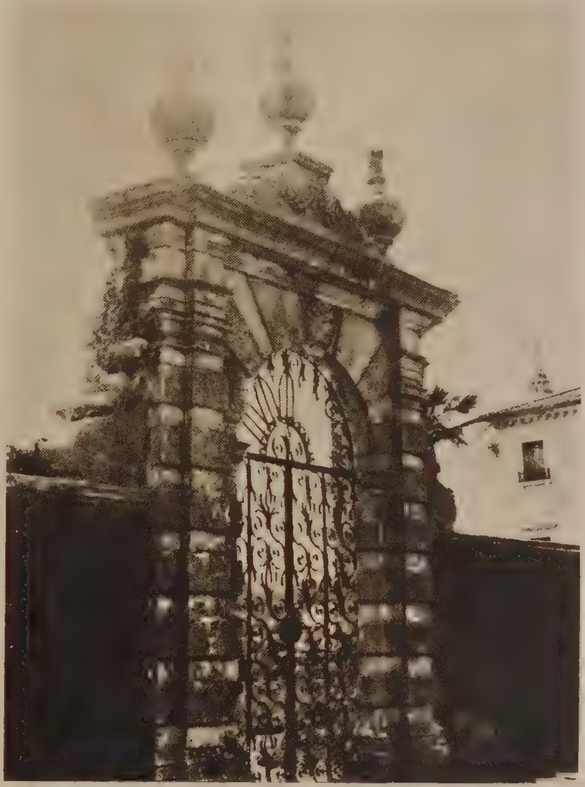
IN following the road from Florence to Venice one goes from Tuscany through regions that once owed allegiance to Venice or Milan, and as these three were practically the only governments strong enough in mediæval times to secure any sort of protection to the rural citizen, one finds older houses along this route than in other parts of Italy.

The road leads by green vineyards and silvery olive orchards and passes many a stately house set apart by cypress trees. The gateways, which face the highway, vary from the simple stone entrance to the pretentious Palladian structure, and offer numerous useful suggestions bearing upon the problems of to-day. Perhaps of no less importance than the gate itself is the type, height, and adaptability of the wall, sometimes a matter of so much concern to the modern architect.

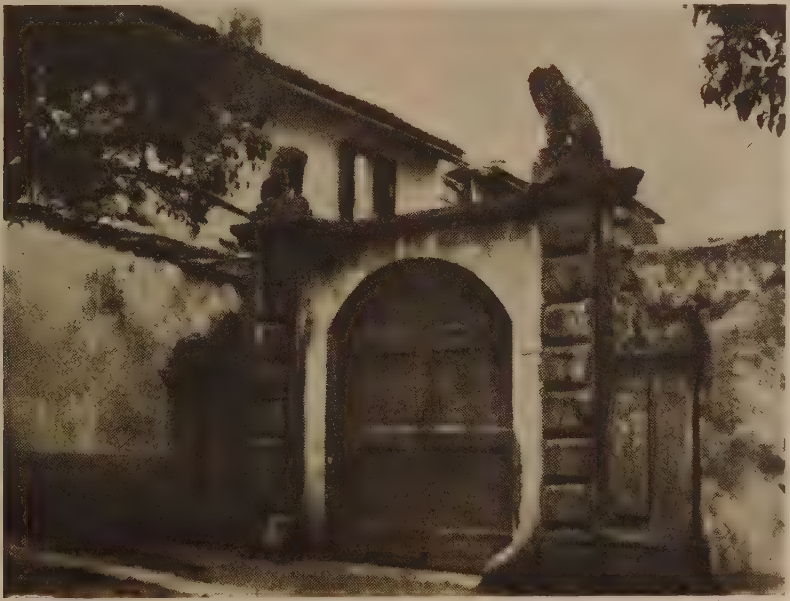
One notes with interest the method of reconciling the plastered wall, the cut stone wall, and the loose masonry wall, of various heights which thread the landscape and frequently meet at the gateway. The perfectly plain wall, of no architectural treatment whatsoever, is harmonized with the highly organized gateway of moulded piers, pilasters, columns, carved crestings, and exquisitely wrought metal work. The whole composition is generally softened with studied planting.

Among the following illustrations one may find solution of many of the gate problems with which the architect is ordinarily confronted.

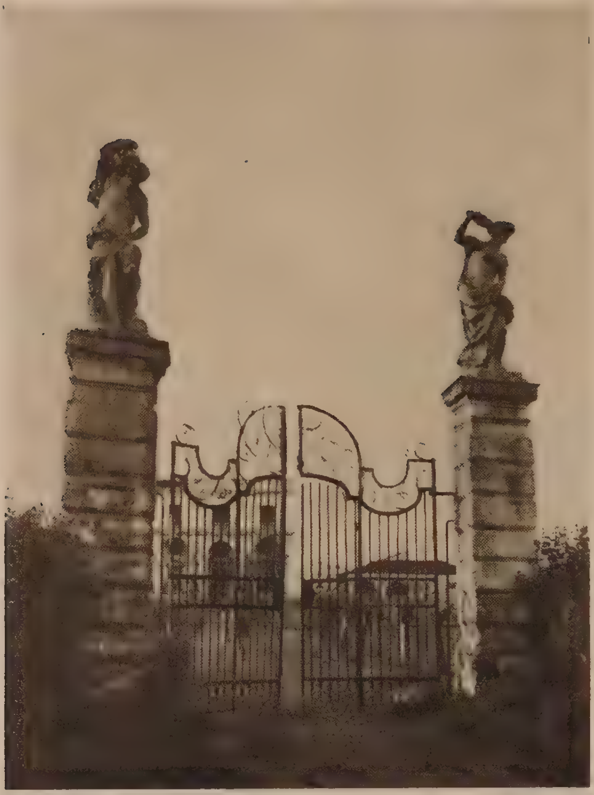
In summary, it is interesting to note that the tendency about Florence is to have simple walls with gateways more or less elaborated; while farther north in the country around Venice that came under the Palladian influence the wall itself assumed greater dignity and the gateway more formality.



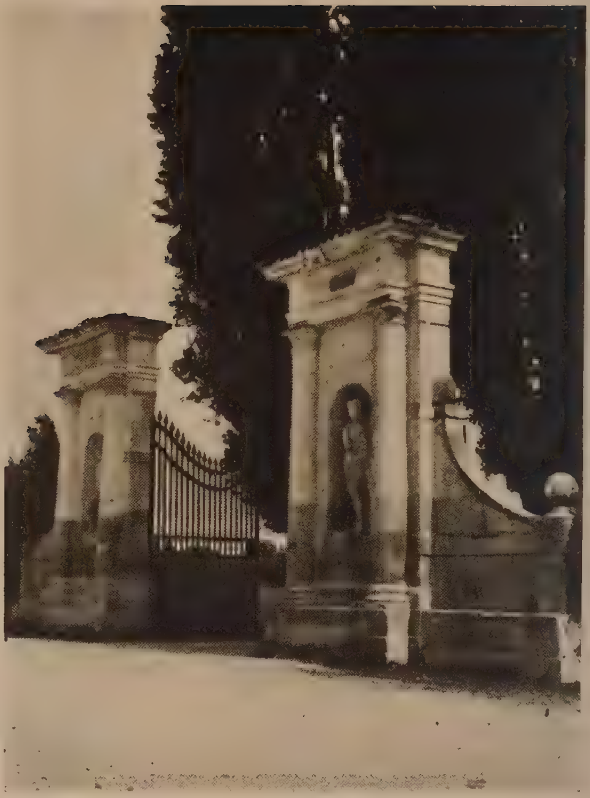
Side gateway to Villa Valmarana, Vicenza.



Gateway united to the house, its individuality being preserved by a wall link. Composes with wall and roof lines of house.

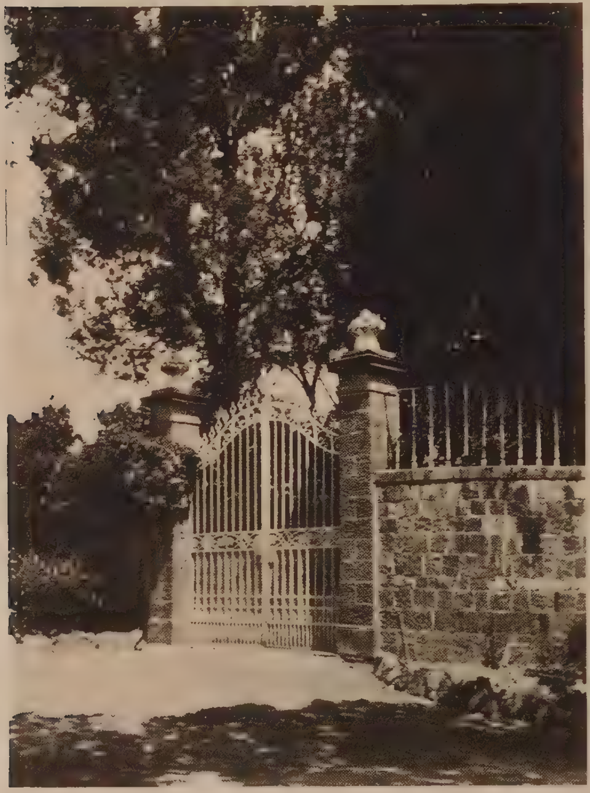


On road to Padua.

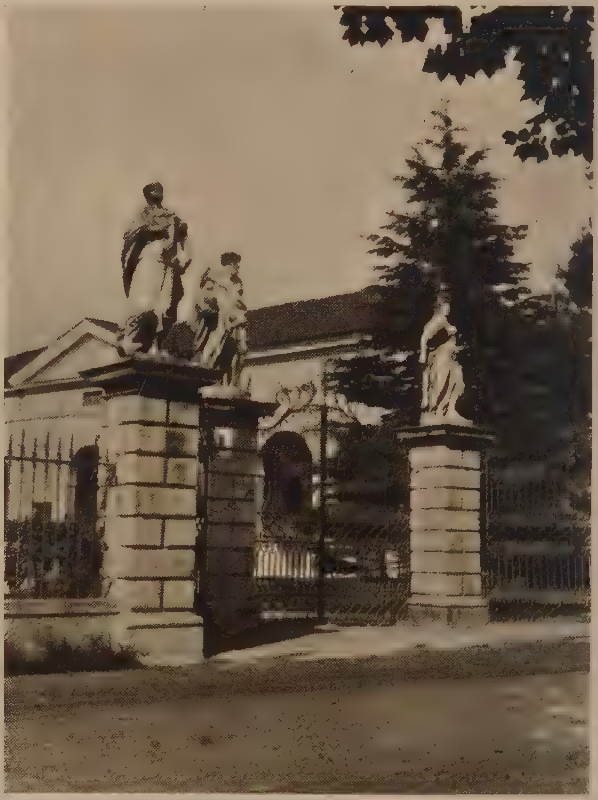


On road to Padua.

The gateway of free standing piers related to the building it subserves by proximity, material, treatment, and color, and to the landscape with suitable planting.



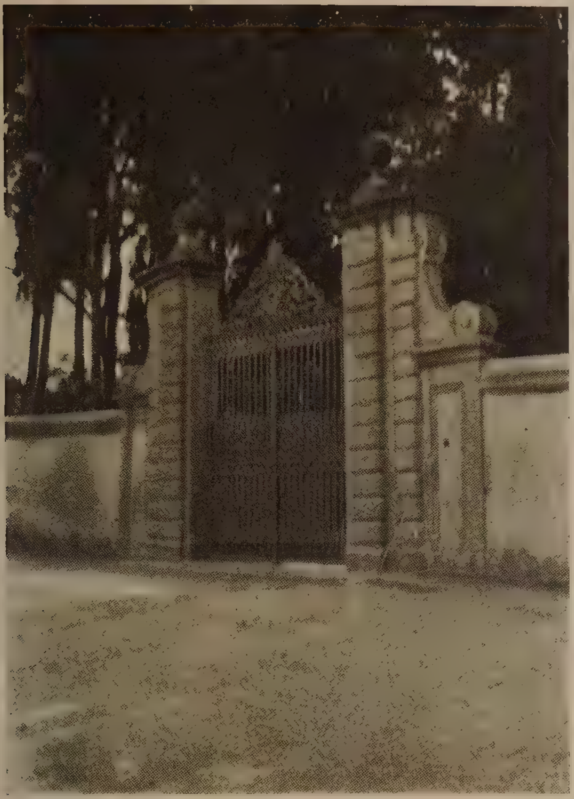
Near Florence.



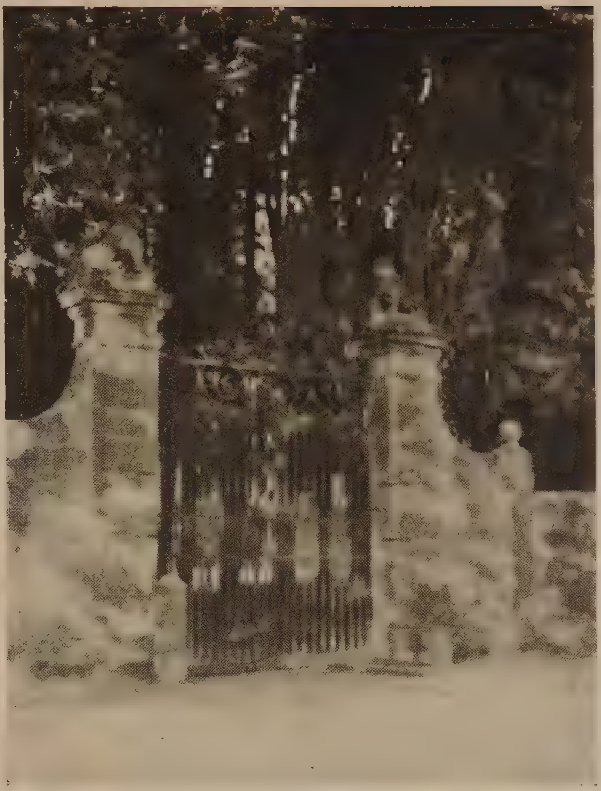
Gateway of Villa Moschini, now owned by an architect.

The type of gateway so frequently found in combination with low walls, the latter surmounted with grille work or backed with high hedges or planting.

GATEWAYS FROM FLORENCE TO VENICE.

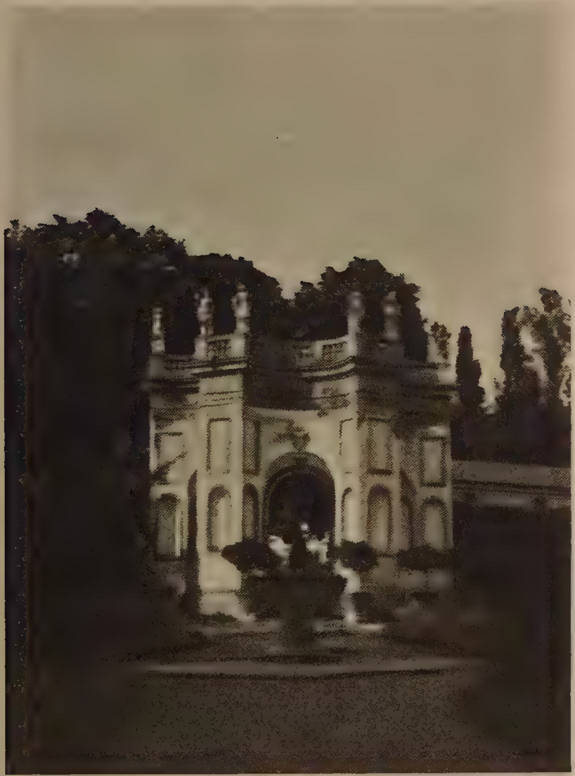


On Bologna Road.

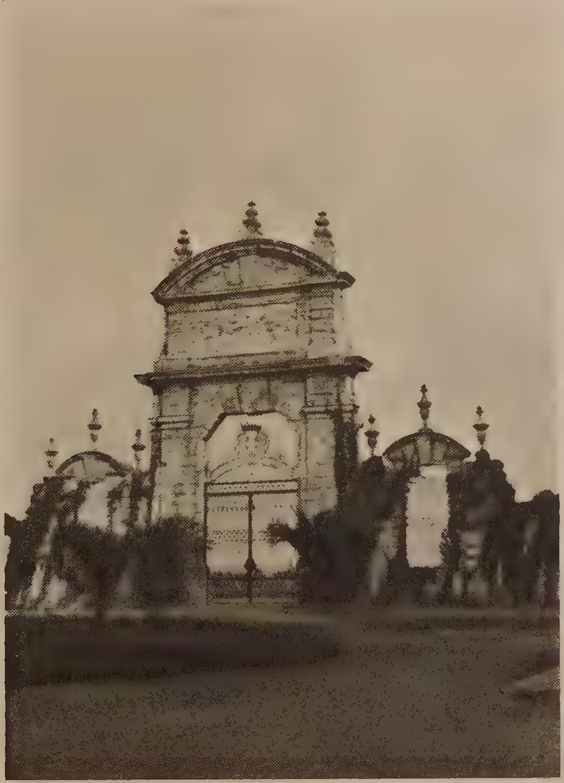


Villa Bancheri; between Florence and Prato.

The gate placed in the more or less elaborate wall where the piers serve the dual purpose of gateway and wall abutments.

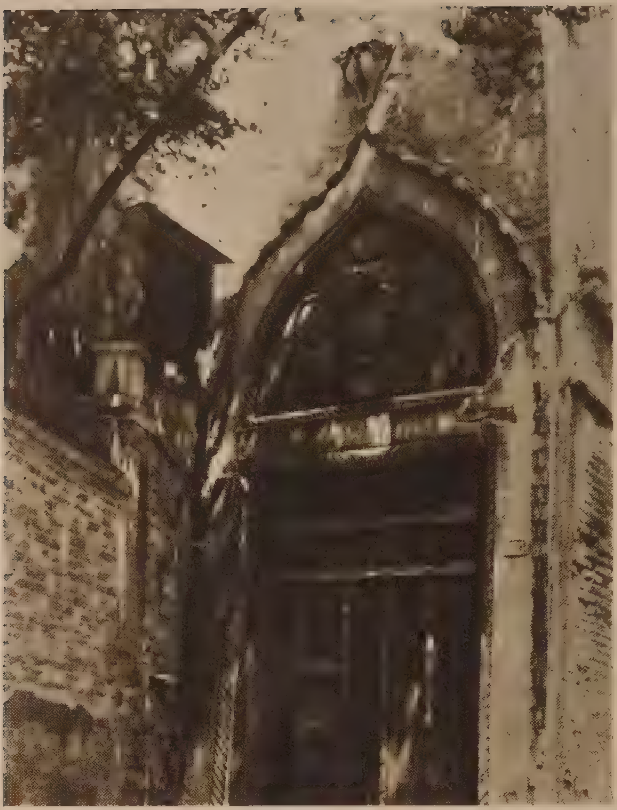


Garden feature. Road Padua-Venice, Palazzo Pisano. Garden pavilion occasionally used as a passageway and a vista termination and providing a mass of masonry where needed against a background of tall trees.

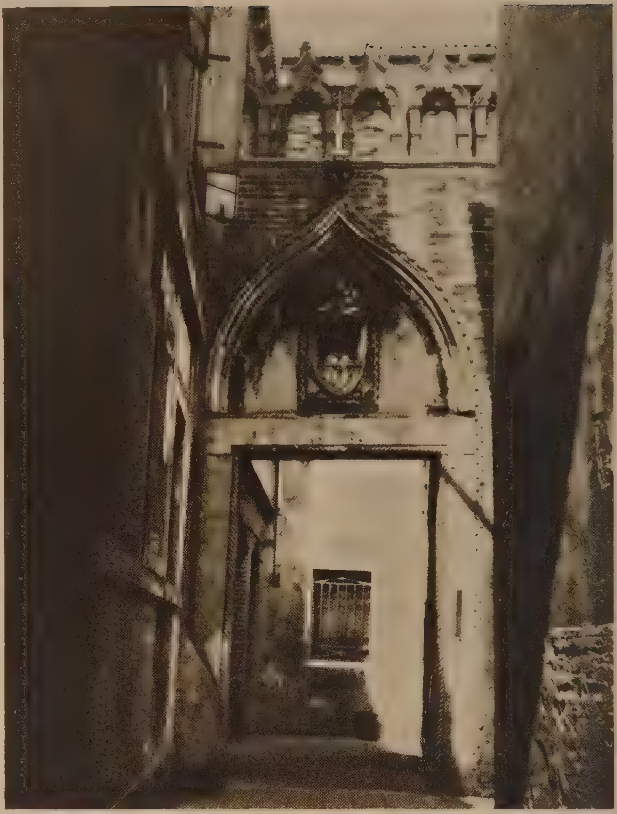


Main entrance, Palazzo Pisano. The more pretentious tripartite gateway of greater height, relation between wall and high central feature achieved by intervening pedestrian ways.

GATEWAYS FROM FLORENCE TO VENICE.

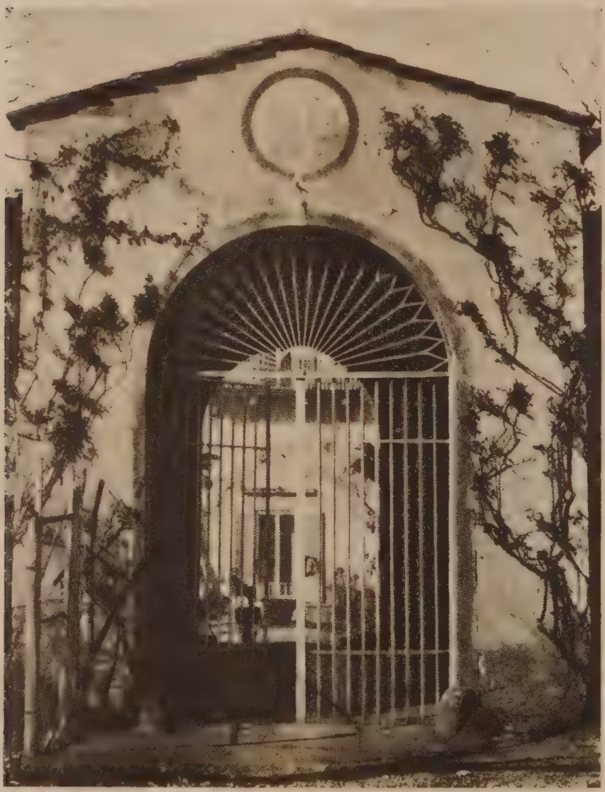


Venice.

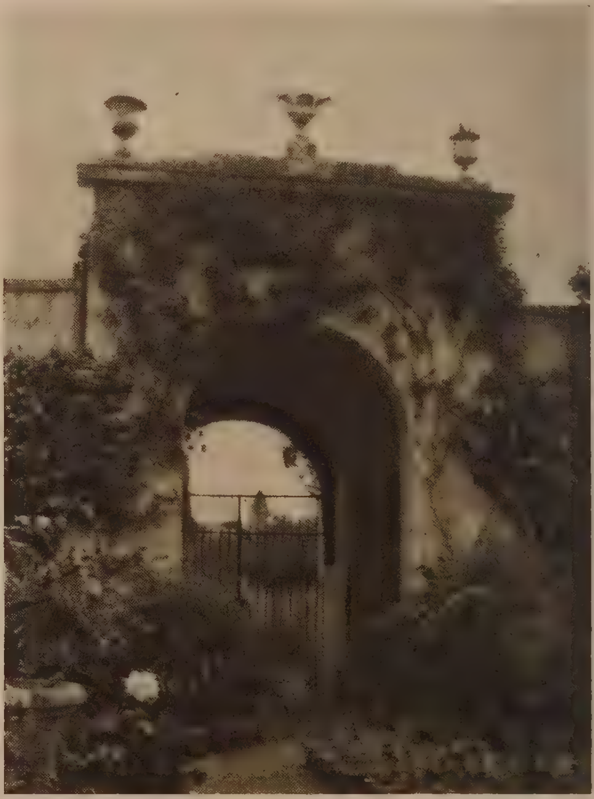


Venice.

The typical gateway of Venice, a single pointed arch, framed with rope moulding, bearing a coat of arms and surmounted with wall.



Villa San Martino.



Villa San Martino.

The opening through high garden walls not entirely dependent for effect upon architectural treatment, but relying also upon adjacent garden accessories and the use of vine.

GATEWAYS FROM FLORENCE TO VENICE.

An Architect's Simple Engineering Problems

By DeWitt Clinton Pond, M.A.

FOURTH ARTICLE

IN the previous article the problem of designing steel beams was described, and an investigation was made of the method of arriving at the selection of beams of proper depth and weight to carry definite loads by means of the section modulus. The term "section modulus" is impressive but, as stated in the last article, it is simply an element of any structural shape, and is listed in the table of elements that are common to all handbooks and catalogues issued by the steel manufacturing companies.

The section-modulus method was used in place of safe-load tables because it has a more general application, and because some handbooks do not contain lists of safe loads. However, the use of the safe-load tables perhaps is more easily understood, and so it may be of interest to investigate how they can be applied to the design of beams.

It will be recalled that the formula $M = \frac{1}{8} W L$ was used to determine the tendency toward bending in a simple beam, and the formula $M = f_s S$ was also used to find the resisting tendency of the beam. In other words, the bending moment caused by the load is given by the first formula, and the resisting moment of the beam is found by the second. Therefore these two can be equated.

$$M = \tfrac{1}{8} W L = f_s S$$

For any given beam and span each quantity in the equations is known except the load, or W. L can be taken as 20 feet or 240 inches. f_s is almost always considered as 16,000 pounds per square inch, and for a given beam the section modulus is found in the list of elements.

Let it be assumed that it is desirable to determine the safe allowable load on a 12-inch, 27.9-pound I beam which spans 20 feet. The section modulus of such a beam can be found in the table of elements, under the heading of S, as 33.2. Substituting the known quantities in the two formulas the following results can be obtained:

$$\tfrac{1}{8} \times W \times 240 = 16{,}000 \times 33.2.$$
$$W = 16{,}000 \times 33.2 \div 30 = 17{,}706.$$

This result checks with the safe, allowable uniform load as given under the general heading of Beams in the "Pocket Companion," issued by the Carnegie Steel Company.

The calculations have been given to show how the safe uniform loads on beams are determined, and to demonstrate how the information given in one table is used to obtain the results in another. It can be seen that the only cases where the tables of safe loads can be used are where the loads are uniformly distributed over the entire span of the beam. Where beams frame into headers or where partitions or walls are to be carried over parts of spans then the tables of uniform loads cannot be used, and the reader should be very careful with regard to this. However, with regard to such a problem as given in the last article, the safe-load tables can be very serviceable.

In this problem the beams spanned 18 feet and were spaced 8 feet on centres. The load per square foot was 125 pounds, and therefore, the load on each beam was 18,000 pounds. Looking in the table of safe uniform loads for beams, it will be necessary to follow down the column in which the spans are listed, and, when the span of 18 feet is found, look to the right until a load as great as 18,000 pounds is noted. The beam that corresponds to this span and load is the one to be chosen to carry the floor slab. The lightest load that a 15-inch beam will carry economically over an 18-foot span is 34,900 pounds, and it can be seen that such a beam would be too expensive for this purpose. Turning to the table of 12-inch beams it will be seen that a 12-inch, 27.9-pound beam will carry a load of 19,700 pounds over a span of 18 feet. A 10-inch beam can be found that will carry the load of 18,000 pounds, but this would weigh 40 pounds per foot and would therefore be almost as expensive as the 15-inch beam, Therefore, the light 12-inch beam should be selected, and this result corresponds with the one obtained in the previous article.

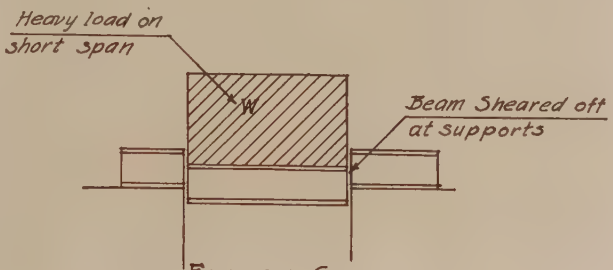


FIGURE 6
Beam will fail by shearing at supports—not by bending

If the tables of safe loads are used, the architect need possess practically no engineering knowledge at all to determine the kind of beam required to carry a certain load. The finding of the load itself will present the most formidable problem, and the methods used to determine such loads have been described in the previous articles, where it was shown that an ordinary knowledge of arithmetic was all that one needed to accomplish this task. Once the load has been determined it is a simple matter to look up the beam that will carry it over the span that is determined in advance by the architectural conditions.

An item that is well worth consideration with regard to the safe load table is the fact that certain of the loads are indicated above a dark horizontal line, and others below a lighter horizontal line. Those above the line will produce the maximum shear in the web. So far nothing has been said about shear but if there is a condition where, on account of a very short span, there is very little chance to cause failure by bending in a beam a heavy load might be placed upon it that would cause it to shear off at the ends. A diagram of such a condition is shown in Fig. 6. The action of the load would be similar to that of a punch that shears out pieces of steel in a plate. There is no question of bending under such conditions.

Steel may be compressed safely by a force that will cause a stress of 16,000 pounds per square inch, but where shear is concerned the allowable shearing stress is only 10,000 pounds per square inch. The flanges of the beam are not considered as resisting shear, and only the area of steel included in the web is used to determine the resistance that a beam develops to shear. A 12-inch, 27.9-pound I beam has a web thickness of .284 inches. As it is 12 inches deep, the area of steel in the web is 3.408 inches. According to the New York Building Code, and, as allowed in general practice, each square inch of steel will resist 10,000 pounds of shearing stress, so that the beam will set up a resistance of 34,080 pounds at each end. A uniformly distributed load of 68,000 pounds will cause a maximum shear, and it will be seen that this is the load listed in the table above the dark horizontal line. The result of this is that a 12-inch, 27.9 pounds, should not have a span of much less than 6 feet — 5.20 feet to be exact, if it is to be loaded to its bending capacity.

There is also a general requirement that beams must not deflect more than one three-hundred-and-sixtieth of their span, when loaded to capacity. In other words, the allowable deflection of a beam can be found by the following calculations:

$$\frac{18 \times 12}{360} = \tfrac{3}{5}$$

If the beam deflects more than three-fifths of an inch there is danger of cracking the plaster on the soffit. If beams are unusually long, although they may safely carry loads that are listed below the light horizontal lines shown in the tables, they will deflect too much. This condition is shown diagrammatically in Fig. 7.

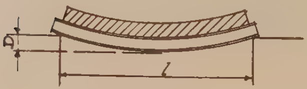


FIGURE 7
Beam will carry load without failure by bending or shearing but will deflect so that D will be more than $\frac{l}{360}$

The formulas dealing with the deflection of beams, while not complicated, involve quantities that must be expressed in figures that are somewhat cumbersome. In the "Pocket Companion" there are diagrams and formulas given under the general heading of "Beams Under Various Loading Conditions," and in Section IX, "Beams Supported at Ends —Uniformly distributed loads"—the formula for deflection is given as follows:

$$D = \frac{5\,Wl^3}{384\,EI}$$

In this formula W as usual represents the load, l the span in inches, E the modulus of elasticity or 29,000,000, and I the well-known moment of inertia.

Let it be assumed that a 12-inch, 27.9-pound I beam is loaded to capacity over a span of 18 feet. Under such conditions the load, as stated before, is 19,700 pounds. It is possible to substitute known quantities for their respective notations. W is 19,700 pounds, l is 216 inches, E is 29,000,000 and I is 199.4 inches raised to the fourth power as shown in the table of elements of beams.

$$D = \frac{5 \times 19{,}700 \times 216 \times 216 \times 216}{384 \times 29{,}000{,}000 \times 199.4} = .447$$

It can be seen that the figures involved are too large to use conveniently although there is nothing complicated about the mathematical work involved. It is also apparent that the deflection is less than $\frac{3}{5}$ of an inch, and therefore the beam is safe.

Another and much more simple method of determining the deflection is by means of the Coefficient of Deflection which is given in a column at the right-hand side of the tables of safe loads. Here it will be noted that the coefficients are given for each span, and by comparing them in different tables it can be seen that the various depths or weights of the beams do not cause any differences in them. As an example the coefficient remains 5.36 for an 18-foot span in each table.

The method of determining the coefficients is somewhat complicated, involving the use of the three formulas used in this article, but the use of them is very simple. If it is desired to determine the deflection of a 12-inch, 27.9 beam when *loaded to capacity* it is necessary simply to divide the coefficient by the depth of the beam. The coefficient, given above for a 12-inch, 27.9-pound beam is 5.36 and the depth of the beam is 12 inches, therefore the deflection on the beam is found as follows:

$$5.36 \div 12 = .447.$$

This checks with the result given above, and is a very simple method of finding the required deflection.

Caution is necessary when one uses tables such as those referred to in this article. The conditions for which they are used must be kept in mind. The safe loads are *uniformly* distributed, and the tables cannot be used where concentrated loads are encountered. The coefficients can be used only where beams are loaded to capacity, with evenly distributed loads.

If the loads on beams do not stress the steel to the allowable fibre stress a smaller deflection will result. Suppose that it was found that a load of 14,200 pounds was to be carried on a 25-foot span. By referring to the table it would be seen that a 12-inch, 27.9-pound beam would carry this load, but that the deflection would be too great as the load is listed below the bottom horizontal line. Therefore, a 12-inch, 31.8-pound beam would be substituted.

In order to determine whether this beam would be strong enough to carry the load without excessive deflection it would be possible to substitute in the formula, but this would involve a long mathematical struggle. As the only difference between the 27.9-pound beam and the 31.8-pound beam as far as this problem is concerned, is in their moments of inertia, the most simple method of determining the deflection would be to modify the coefficient in accordance with this difference.

The moment of inertia of the light beam is 199.4 and of the heavier one is 215.8, and the coefficient for a 25-foot span is 10.35.

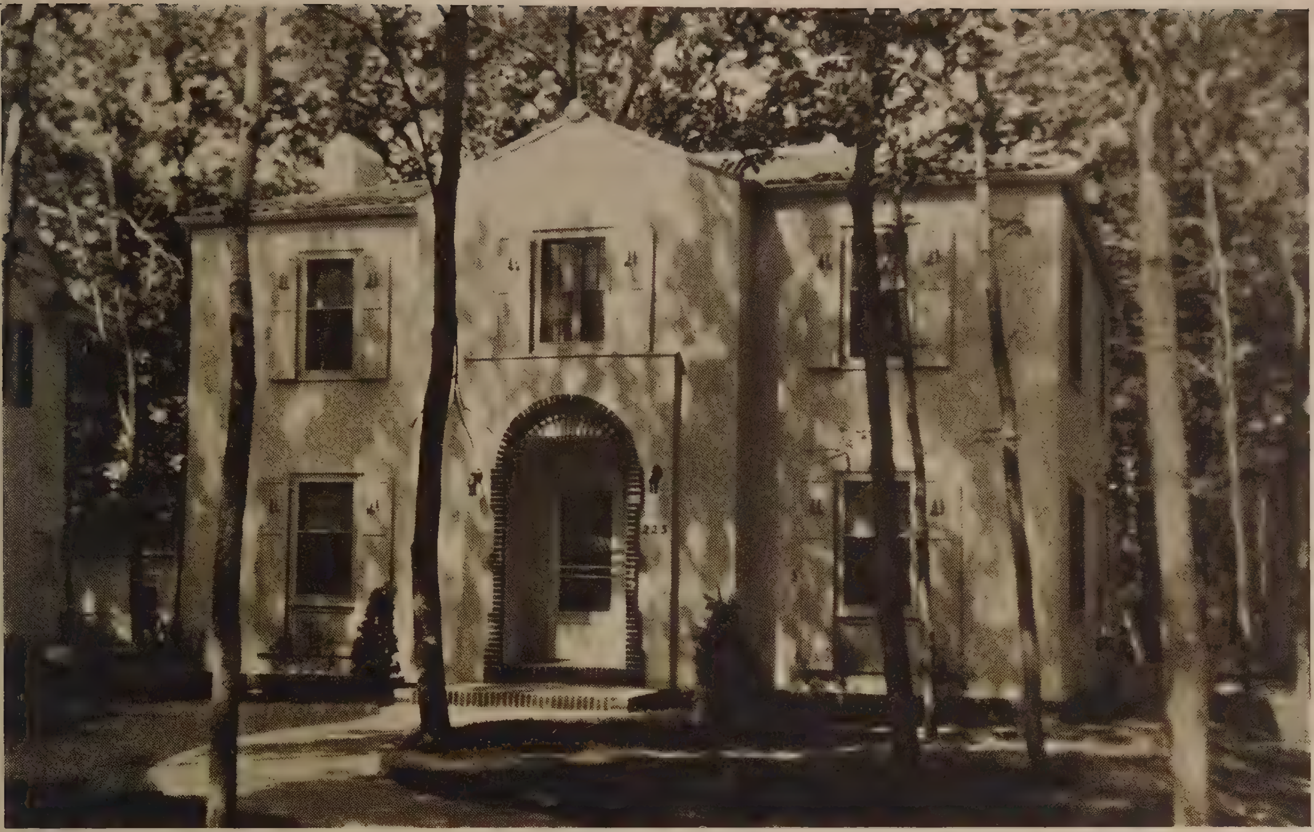
$$\frac{199.4}{215.8} \times 10.35 = 9.56 = \text{coefficient.}$$

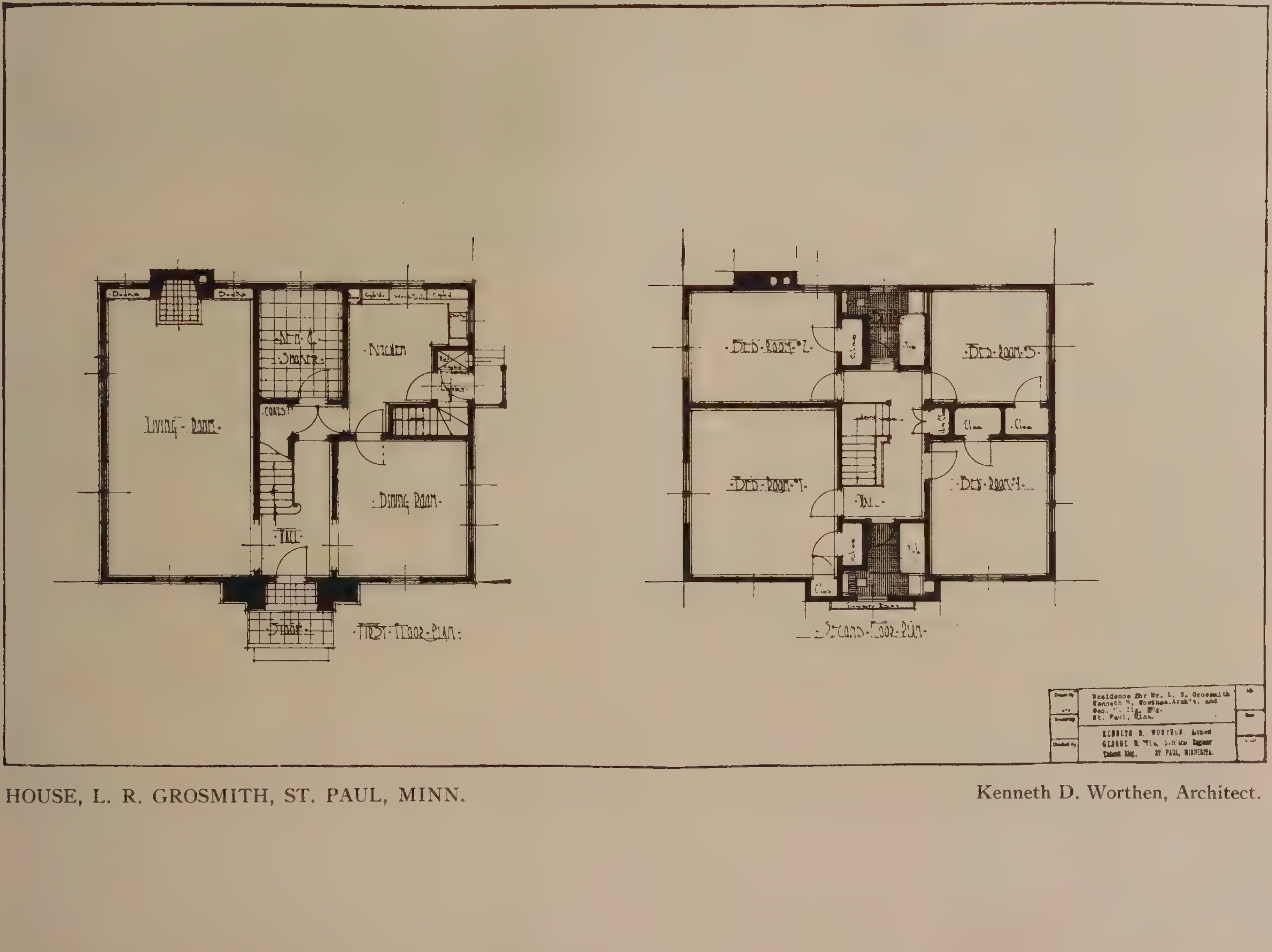
$$\frac{9.56}{12} = .796 = D = \text{deflection.}$$

$$\frac{25 \times 12}{360} = .833 = D = \text{allowable deflection.}$$

From the calculations given above it can be seen that the 31.8-pound beam will carry the load without excessive deflection. However, it might be advisable to use a deeper beam in any case, provided the condition is a special one.

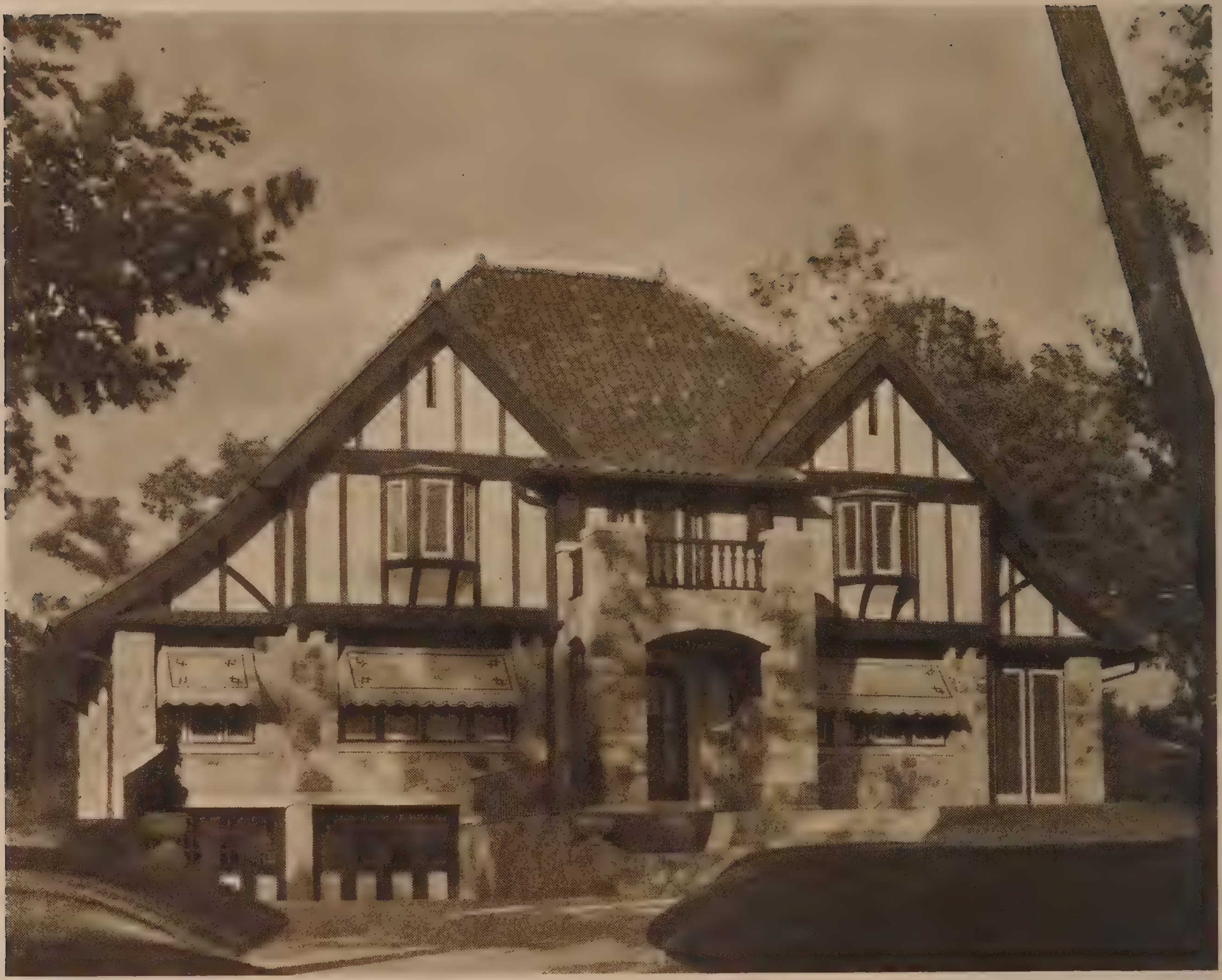
If the cautions that have been given are always kept in mind the safe load tables can be used in such a manner as to eliminate no small amount of work.

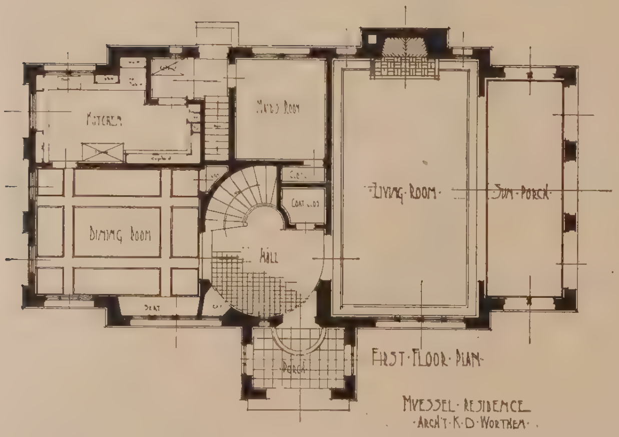


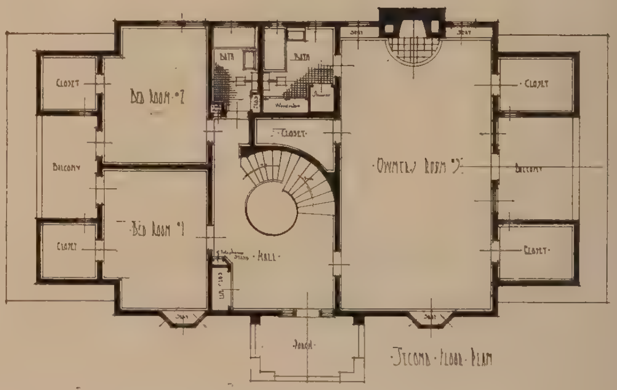


HOUSE, L. R. GROSMITH, ST. PAUL, MINN.

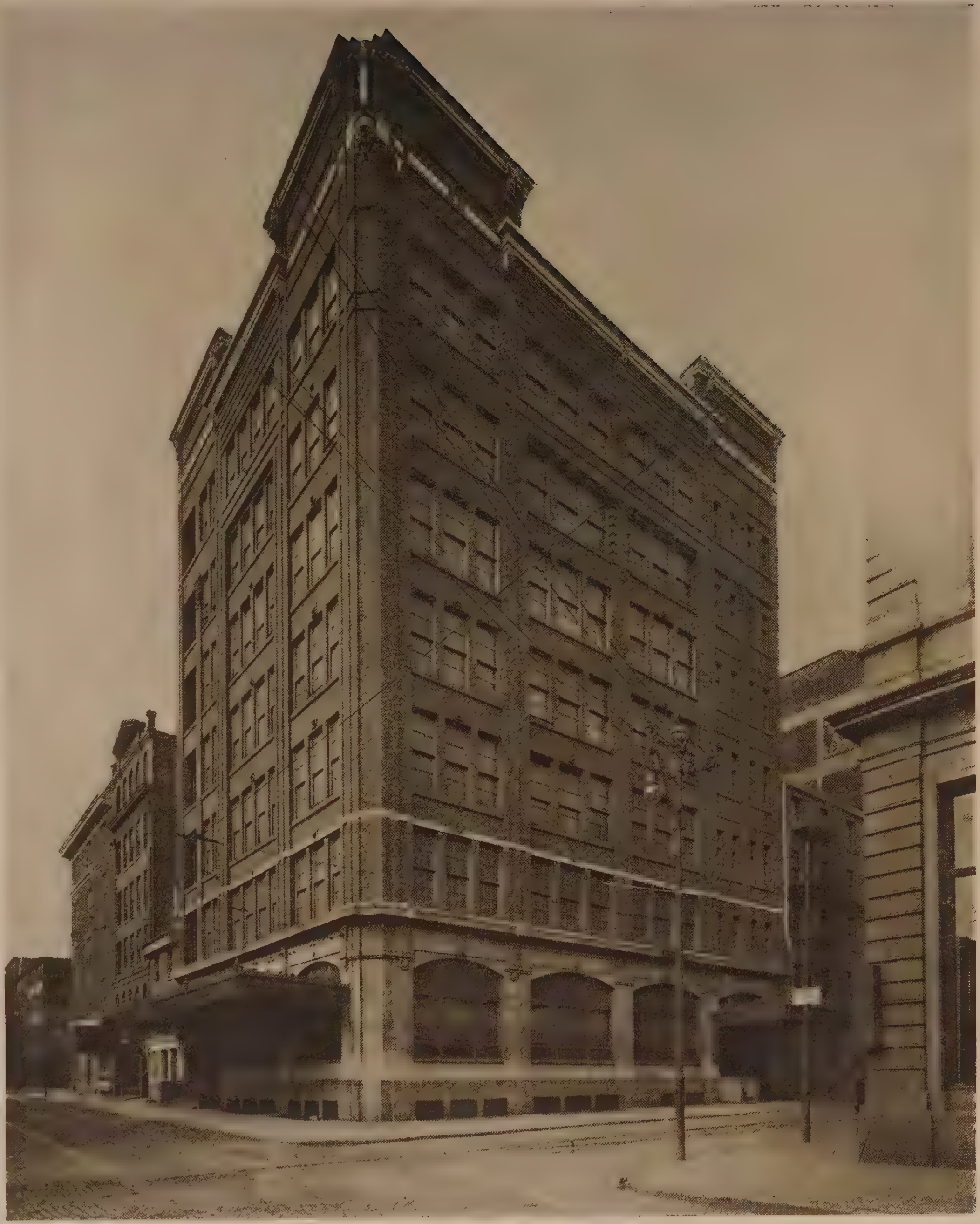
Kenneth D. Worthen, Architect.



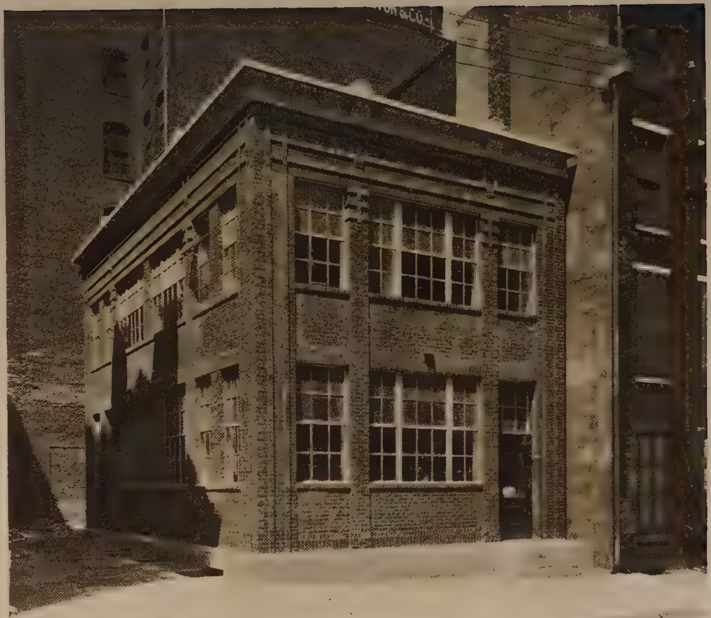




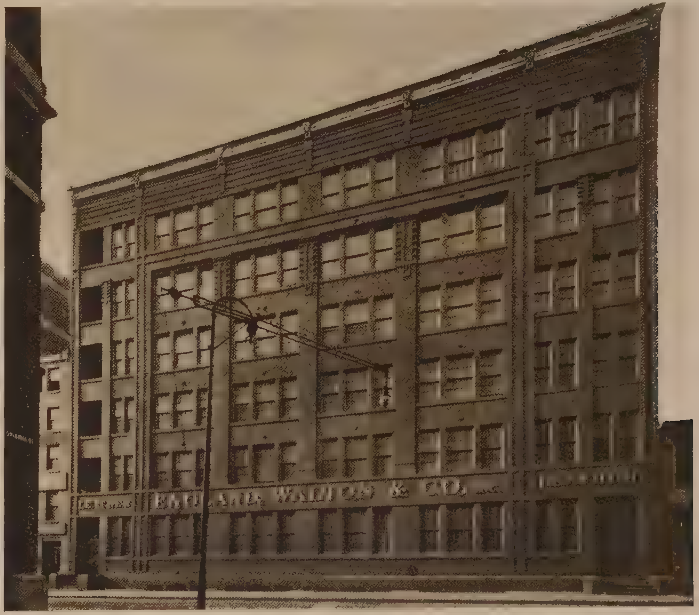
RESIDENCE, L. A. MUESSEL, ST. PAUL, MINN. Kenneth D. Worthen, Architect.



OFFICE-BUILDING.



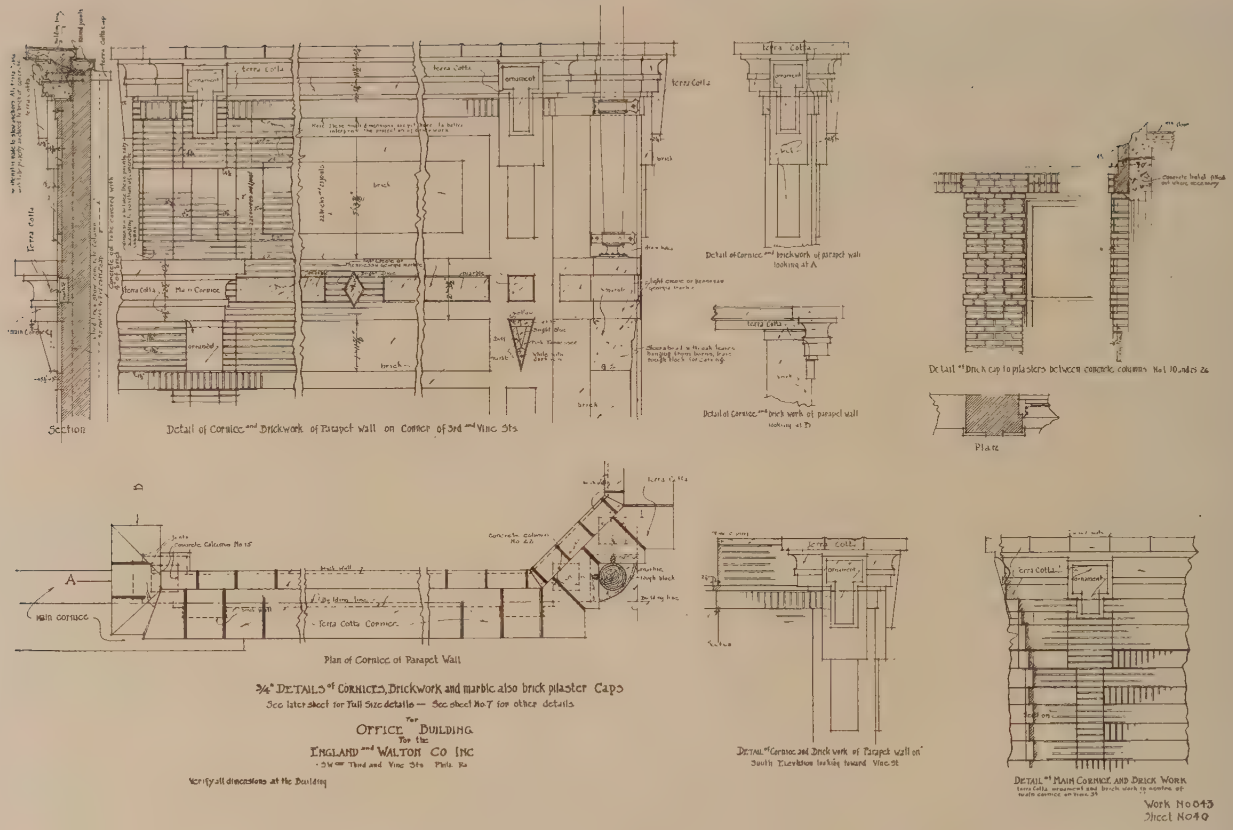
CHEMICAL LABORATORY.

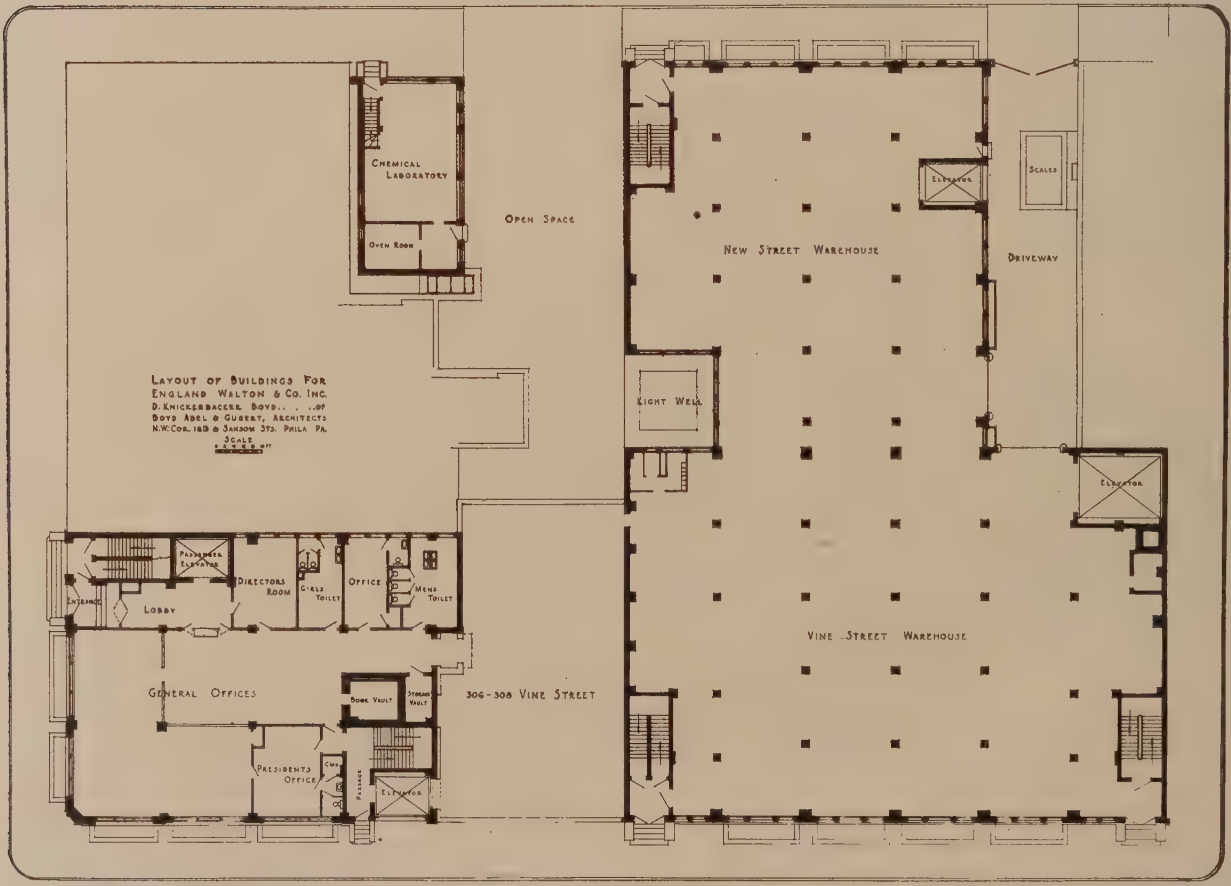


WAREHOUSE.

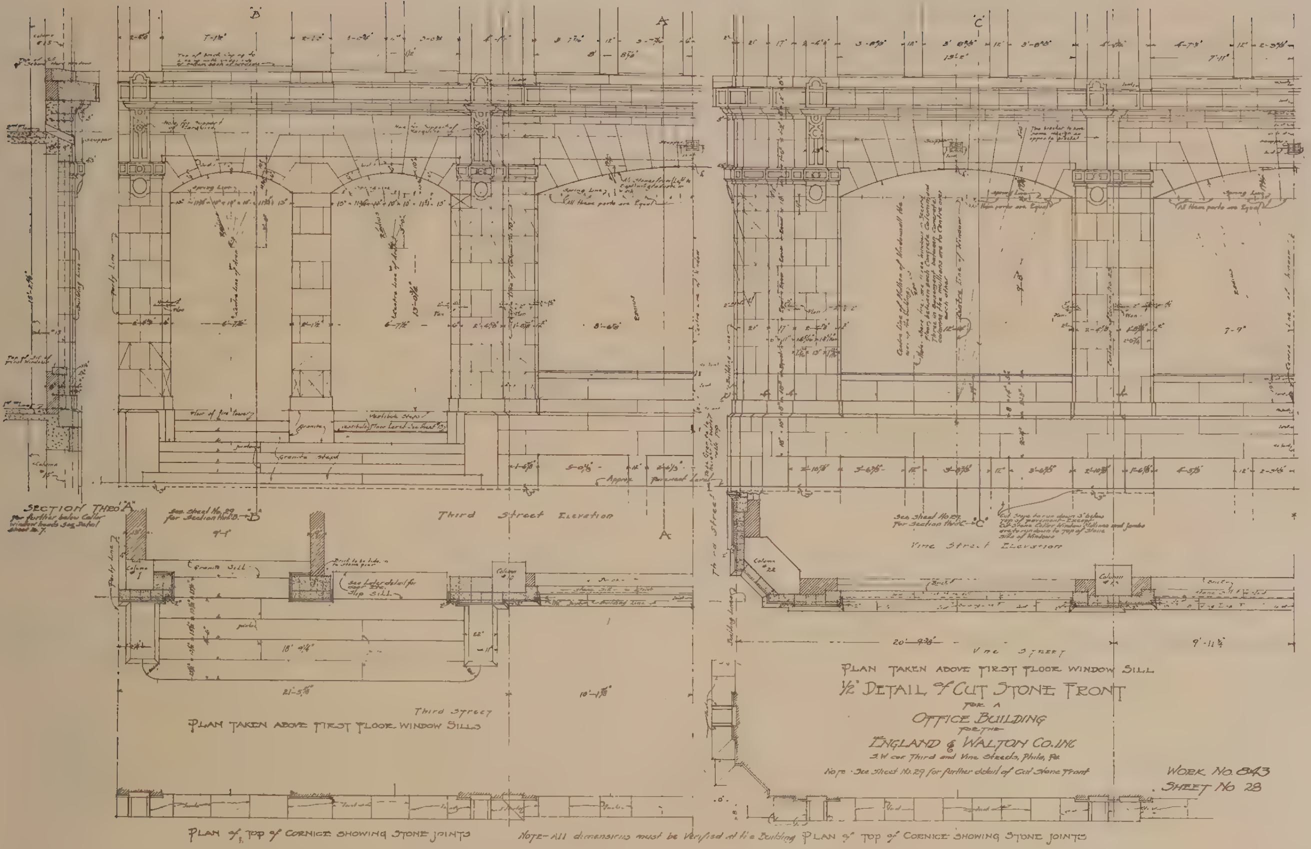
ENGLAND, WALTON & CO., INC., PHILADELPHIA, PA.

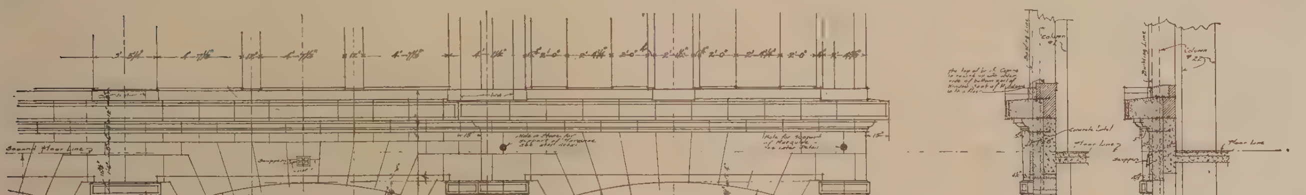
David Knickerbacker Boyd, Boyd, Abel & Gugert, Architects.


Section
Terra Cotta
Main Cornice
ornament
brick
Detail of Cornice and Brickwork of Parapet Wall on Corner of 3rd and Vine Sts
Detail of Cornice and brickwork of parapet wall looking at A
Detail of Cornice and brick work of parapet wall looking at D
Detail of Brick cap to pilasters between concrete columns No 1 10 and 26
Plan
A
D
Main cornice
Concrete Column No 15
Concrete column No 22
Terra Cotta Cornice
Plan of Cornice of Parapet Wall
3/4" DETAILS of CORNICES, Brickwork and marble also brick pilaster Caps
See later sheet for Full Size details — See sheet No 7 for other details
for
OFFICE BUILDING
for the
ENGLAND and WALTON CO INC
S.W. cor Third and Vine Sts Phila Pa
Verify all dimensions at the Building
Detail of Cornice and Brick work of Parapet wall on South Elevation looking toward Vine St
DETAIL of MAIN CORNICE AND BRICK WORK
Work No 843
Sheet No 40



David Knickerbacker Boyd, Boyd, Abel & Gugert, Architects.


SECTION THRO 'A'
Third Street Elevation
Vine Street Elevation
PLAN TAKEN ABOVE FIRST FLOOR WINDOW SILLS
Third Street
Vine Street
PLAN TAKEN ABOVE FIRST FLOOR WINDOW SILL
½" DETAIL OF CUT STONE FRONT
FOR A
OFFICE BUILDING
FOR THE
ENGLAND & WALTON CO. INC
S.W. cor Third and Vine Streets, Phila. Pa
Note - See Sheet No. 29 for further detail of Cut Stone Front
WORK No. 843
SHEET No 28
PLAN OF TOP OF CORNICE SHOWING STONE JOINTS
Note - All dimensions must be verified at the Building
PLAN OF TOP OF CORNICE SHOWING STONE JOINTS


Second Floor Line
First Floor Line
Pavement Level
VINE STREET ELEVATION
SECTION THRO 'B'
See Sheet No. 28
SECTION THRO 'C'
See Sheet No. 28
PLAN TAKEN ABOVE FIRST FLOOR WINDOW SILL
PLAN OF TOP OF CORNICE SHOWING STONE JOINTS
Note - All dimensions must be verified at the Building.
½" DETAIL OF CUT STONE FRONT
FOR A
OFFICE BUILDING
FOR THE
ENGLAND & WALTON CO. INC
S.W. cor Third & Vine Streets, Phila. Pa.
Note - See Sheet No. 28 for further detail of Cut Stone Front.

David Knickerbacker Boyd, Boyd, Abel & Gugert, Architects.

The Draftsman

From a Paper Delivered Before the Chicago Chapter by George S. Bannister, Manager of the Architects' (Employment) Agency

EAGER ability is looking for the right opportunity today as in the past, but many employers fail to recognize that fact and nullify the effort of the worker to grasp the desired opportunity.

The employer of the future who relies entirely on record and reference will miss the opportunity to employ the keen and eager workers.

The kindly employer knows that character comes first; that there is a vast difference between ego and ability; that the best workers refrain from self-praise, but quietly and accurately state their real worth; that ability counts for little without nerve, but nerve can be modest; that there are so many exceptions to the rules prescribed for character reading and analysis that the rules often become impractical; that integrity and dependability are not fixed qualities and a man may fail and yet make good under different conditions, or a man may make good and then fail under other conditions; that enthusiasm is a most desirable trait, and that hope, faith, and self-reliance are the big producers. Tact and politeness are very valuable assets, and good health is not always essential.

The brain-worker *must* be sold on the thing beyond, on the pride of achievement, on the work for the sake of the work itself. No worker can be happy or successful unless he finds pride and satisfaction in his work. If his work is a meal-ticket, it is a treadmill only, and he will soon be seeking other employment. Adequate pay should be given for good work, but this is not the whole of job satisfaction. Money will not buy that whole-hearted intelligent endeavor that goes with success. Personal pleasure in helping to create something new or exceptionally good is the only thing that puts it over.

We must get in touch with young men who want to create things, who take an interest in the work of turning out something worth while. You can't sell a crook or an incompetent on pleasure of achievement, for his motto is: "money on the table."

The question is often asked and has been more frequent for the past two years: Why is it so difficult to secure high-grade draftsmen? As I see it there are several reasons for this. The World War interfered with the education of some of the good men or men who would have been good by this time. At the University of Illinois one year during the war, there were only seven graduates, and each one of them had a position waiting for him when he graduated.

Last year the University of Illinois was said to have in its architectural department nearly 400 students. This means that later on there will be more trained men available for your offices, and we find that as a rule the men who have had a good education in one of the good architectural schools are in demand, and this demand seems to grow with the years. Architects who ten years ago did not care whether a draftsman was a college-trained man or not, now demand the college man and will have no other.

Many draftsmen have gone into business for themselves in the last five years. In a list of architects you will probably find two men in every five are new to the list of five or six years ago. Moreover, many draftsmen have gone into other lines, due to uncertain employment and the poor pay offered them. Some of them are now laying brick because a bricklayer can make $100 per week, or 30 to 50 per cent more than the draftsman.

Yours is *not* the only business that is having trouble securing the proper help. It costs Marshall Field & Co. $100 for every new employee they put to work. It costs Montgomery Ward & Co. $30 to get an application from an employable person. It costs one firm in a Western city $450 per turnover in their sales department.

But we need not consider only the cost, for in the business world there are industries paralyzed for lack of brain and nerve energy. Opportunities are begging for men. Too rarely do ambition and the right opportunity meet. Take the case of Brown, a graduate of the School of Architecture of the University of Illinois. We were not able to properly place him for several months. We finally had a call from the chief draftsman of one of your chapter members for about such a man. We told him about Brown over the phone, and he said: "Don't send him, we want a man with more *practical* experience." Not having an opportunity to tell Brown's story, we asked him to go and tell it himself, which he did, and secured the position, and on his first pay day he received more money in his pay envelope than the chief draftsman had promised when he hired him.

Brown was a very keen and ambitious worker, he had secured a position for the three months of every school vacation in an architect's office. He had taken extra work during his second and third years at the university, so that when his fourth year came around he had very little school work to do in order to graduate, so he worked in the office of James M. White, supervising architect, all the spare time he could, which most of the year amounted to from 30 to 35 hours a week, so that Brown, when he graduated, was a real draftsman. In about two years from his graduation he was chief draftsman of a Chicago office employing 5 to 10 men. When the war came he joined the navy, and later was sent to Washington, where he became an executive in charge of building construction in the small navy-yards, where he built houses, warehouses, factories, etc. After the war we put him in touch with an architect in a Western city, where he formed a partnership, and the firm did between two and three million dollars' worth of work the first year of the partnership. This is a true story except as to the name, and it has been told to illustrate how a man can be made more valuable for your office by the additional training secured in the university office. It is my belief that every graduate from the university school should be required, as a part of his course, to spend a designated number of hours in the practical work of an architect's office and be paid according to ability, and this should apply to all the universities having courses in architecture.

From the Leaflet (of the Chicago Chapter), American Institute of Architects.

Announcements

Beniamino Bufano, whose work has been on exhibition at the Arden Gallery, 599 Fifth Avenue, New York, was born in Italy. He began modelling when he was still a child, and some of his sculpture was exhibited in Rome and in Paris when he was only fourteen. Both of these exhibitions created a stir among the critics, not only because of the sensational youth of the artist, but also because of the fine quality of his execution. The next year, when just fifteen, he came to New York and enrolled in the Art Students' League. At the same time he found employment in the studios of first one and then another prominent sculptor from whom he wished to learn by silent observation—working among others for Paul Manship and Leigh Hunt.

Hart & Nevins, architects, and Freeland, Roberts & Company, engineers, announce the organization of Hart, Nevins, Freeland & Roberts, architects and engineers, Independent Life Building, Nashville, Tenn., and extend the season's greetings with a wish for a happy and prosperous new year. The members are Russell E. Hart, A. I. A.; George D. Nevins, A. I. A.; L. R. Currey, Jr., A. S. C. E.; F. E. Freeland, A. S. C. E.; M. S. Roberts, A. S. M. E.

Daniel H. Farnam and Ralph E. Lawrence, architects, announce the removal of their offices to 977 The Arcade, Euclid Avenue entrance, Cleveland, Ohio.

Clausen & Kruse, architects, and Carrol A. Klein, architect, announce that after January 1, 1925, they will practice under the firm name of Clausen, Kruse & Klein, architects, 910 Kahl Building, Davenport, Iowa.

Koehl and diNardo, architects, have moved their offices from The Park Building to The Rogers Building, 1720 Euclid Avenue, Cleveland, Ohio.

John S. Van Wart and Alfred C. Wein announce that they have associated for the general practice of architecture under the firm name of Van Wart & Wein, with offices at 347 Madison Avenue, New York.

Fred L. Knoblock, architect, has opened offices at 2331 East 5th Street, Tulsa, Okla., for the practice of architecture. He will be glad to receive manufacturers' samples and literature.

Mr. G. Frank Witman announces that the former partnership of Hamme & Witman, registered architects, York, Pa., has been dissolved. It is further announced that Mr. Witman has entered into a co-partnership with Mr. James A. Royer for the general practice of architecture under the firm name of Witman & Royer, registered architects. The new firm has established offices at 47 East Market Street, York, Pa. Manufacturers' samples and literature are desired.

Stanley & Scheibel, architects, announce the removal of their offices from 1301 Wick Building to 1301–6 Realty Building, Youngstown, Ohio.

Robert M. Ayres, of the firm of Atlee B. and Robert M. Ayres, architects, San Antonio, Texas, has lately returned from a five-months trip in England, France, Spain, and Italy.

K-C

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Stock list "A" sent on request

John E. Sindoni announces that he has opened new offices at the southeast corner Norwood and McKean Streets, Philadelphia, Pa., and would like to receive manufacturers' catalogues.

Temple and Burrows, architects, announce that after January 1, 1925, Parke T. Burrows will retire from practice, and thereafter the practice will be carried on under the name of Seth J. Temple, architect, 730 Union-Davenport Building, 111 East Third Street, Davenport, Iowa.

Harvard Business School Architects Chosen

McKIM, MEAD & WHITE, of New York, have been selected the architects for the new group of buildings for the Harvard Business School, under the George F. Baker Foundation.

The jury to make the selection in the final stage of the competition was composed of: President A. Lawrence Lowell, chairman; George F. Baker, donor of the proposed buildings; Charles F. Adams, treasurer of the university; and the following architects chosen from a list suggested by the competitors: John Russell Pope, of New York; M. B. Medary, Jr., of Zantzinger, Borie & Medary, of Philadelphia; and Louis Ayres, of York and Sawyer, New York.

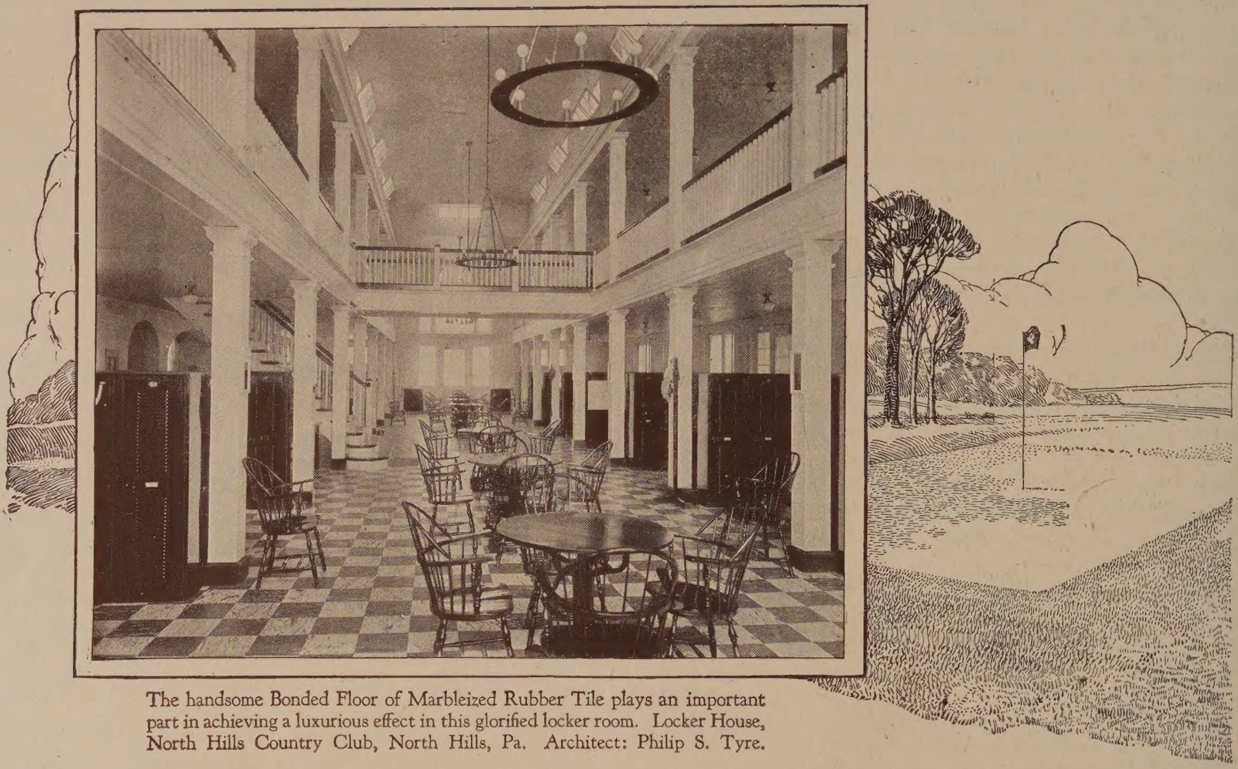
The competition was in two stages and the competitors in the final stage consisted of the six winners chosen some two months ago from the forty-nine original contestants, together with six originally chosen to enter the final stage without participation in the first stage because of previous work for the university, for Harvard Clubs, for the donor, or who have official connection with the School of Architecture of the university.

Those in the final stage of the competition as the result of successfully winning the first stage were: Aymar Embury II; Raymond M. Hood; Ludlow & Peabody with Harold F. Kellogg, of Boston, associated; Benjamin W. Morris with Eric Gugler, associated; Egerton Swartwout, all of New York; and Hewitt and Brown, of Minneapolis.

Those originally chosen to enter the final stage direct were: Coolidge, Shepley, Bulfinch & Abbott, of Boston; Professor J. J. Haffner, of the Harvard School of Architecture, with Perry, Shaw and Hepburn, of Boston, associated; Guy Lowell, of Boston; McKim, Mead & White, of New York; Parker, Thomas & Rice, of Boston; and Walker & Gillette, of New York.

McKim, Mead & White have designed distinguished buildings throughout the country far too numerous to mention. Outstanding examples are: The Boston Public Library, the University and Century Clubs, Pennsylvania Station, Municipal Building, Morgan Library, Post-office, and the Library of Columbia University, all of New York, the Rhode Island State Capitol, and the Minneapolis Art Museum. They designed Robinson Hall, the Harvard Union, and the Stadium at Harvard University, as well as the Harvard Club of New York.

With the selection of the architect, work on the actual plans for the new buildings will be pushed forward as rapidly as possible, according to Professor Killam of the Harvard School of Architecture, professional adviser for the competition. The buildings are to be located on the Boston side of the Charles River, near the Harvard Stadium, and it is hoped that the actual construction may be undertaken soon after the beginning of 1926.



The handsome Bonded Floor of Marbleized Rubber Tile plays an important part in achieving a luxurious effect in this glorified locker room. Locker House, North Hills Country Club, North Hills, Pa. Architect: Philip S. Tyre.

At the 19th hole

Suitability plus durability—in three words you explain why a Bonded Floor of Marbleized Rubber Tile was chosen for the locker room pictured above. In the same three words is the reason why Bonded Floors simplify the architect's work of harmonizing his floors with his decorative plan.

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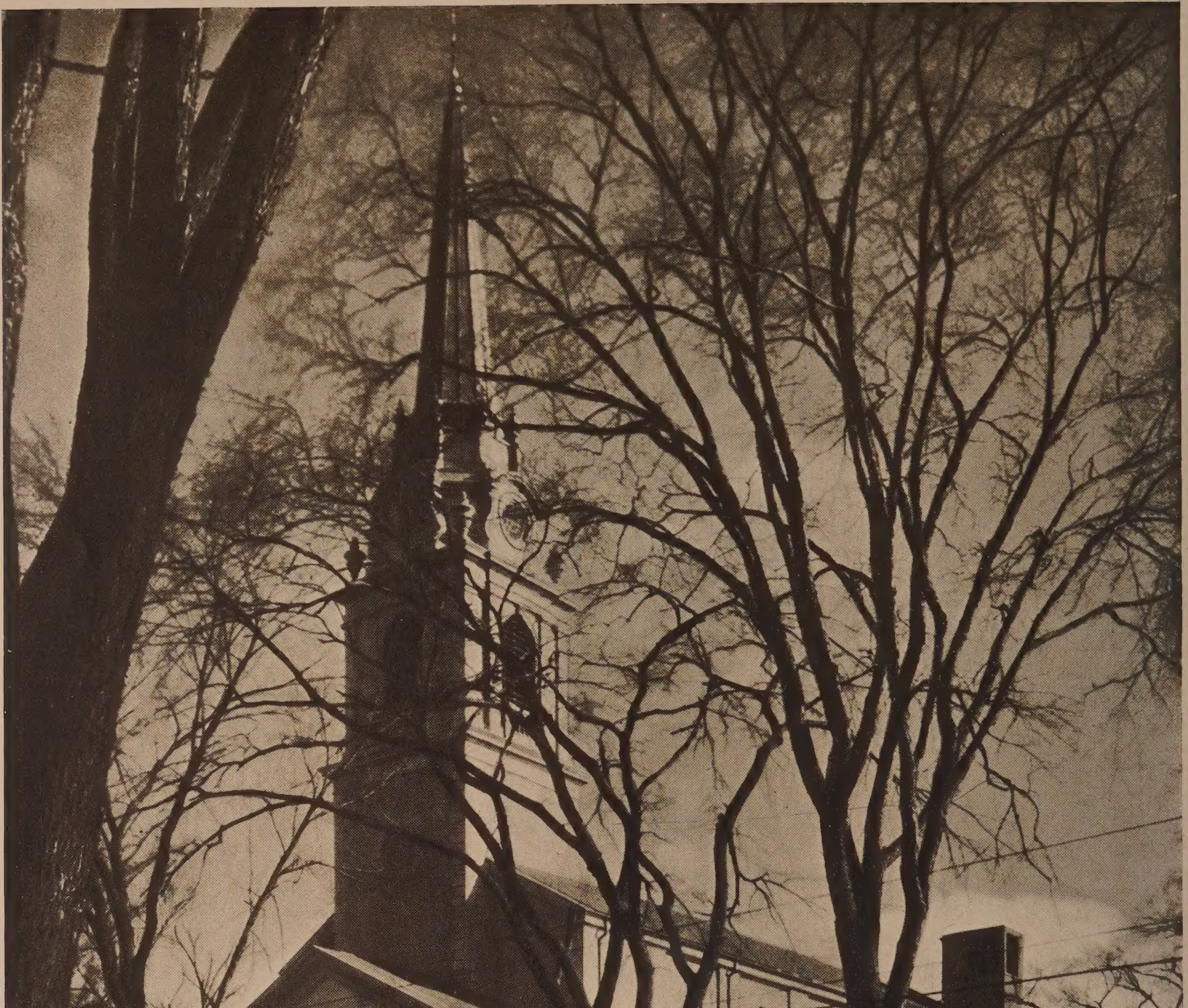

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Cram & Ferguson, Architects; Rushmer & Jennison, Associate Architects.